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29,000 copies of NEW REMEDIES have so far been issued this year, an average of over 7,000 copies a month. An advertisement in this journal is seen and read by more Druggists and Physicians dispensing their own medicines, than in any other.

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EDITORIAL.

COUNTER-PRESCRIBING has for several weeks been a source of constant discussion in British medical and pharmaceutical journals, owing to the success of the Medical Defence Association in prosecuting a case under the "Apothecaries' Act." We congratulate our editorial confrères on the other side of the ocean upon the prospect of unlimited material to write about; but we can assure them that it has not taken us one hundred and fifty years to discover, that the more we legislate in the interests of classes, the worse such classes usually find their conditions at the end of a very brief period.

We are surprised that, in a country which is held up to us as the home of free-trade doctrines, it should seem just to enact laws which give a monopoly of furnishing advice in medical matters to any body of men. The enforcement of such laws will be one of the most difficult things to be accomplished; and the infringements, in the nature of things, must be of hourly occurrence in every town.

The well-worn and threadbare arguments which have been made to do duty in these discussions presuppose that the public are not able to judge for themselves, and need to be guided by those who have skill and experience.

If doctors never disagreed, and the effects of remedies were as well understood as those of beef, potatoes and milk, it is possible that the public would not wait for laws to be passed for their protection, but would look after their enactment and enforcement themselves. Unfortunately, the limit of knowledge in medical science has not been reached, and the pharmaceutical chemist and apothecary has not yet emancipated himself from the necessities of trade; and any attempt on the part of physicians to monopolize the right to dictate what remedies shall be used, or the occasions for using them; or of the other to limit the sale of articles in so general demand as medicines to any select class of the community, is not to be distinguished by the average mind from the ordinary manifestations of trade-unionism.

When a person applies to an apothecary for something to relieve a common disturbance of his

health, and trusts to the apothecary's knowledge of his business that he will get something that will not be likely to do harm and may do good, he takes the chances of his diagnosis being correct, and dispenses with skilled advice. If, right or wrong, he thinks more of his own opinion, or that of the apothecary, than that of a physician, no amount of law-making can oblige him to consult a physician before resorting to an apothecary, so long as he is expected to pay the doctor's bill out of his own pocket. And when the question of expense is one to be considered, and a doctor's fee of $1.00 and upwards, *plus* the cost of the medicine, or the cost of the medicine alone, is in question, the patient who cannot afford what he may choose to consider a luxury, pays his money for what is undoubtedly the necessity, and trusts that a man who handles, manufactures and deals in drugs and medicines must know something, and very likely knows a good deal, about their action, and the cases in which their use would be proper.

If any considerable number of physicians were willing to undertake the trouble and expense of dispensing the greater part of their own prescriptions, it is not to be doubted that they would gain in number of patients and amount of income; and the younger ones, at least, would be much more familiar with the agents they are supposed to know all about than many of them now are. There may be those who believe that the public will, in time, get to placing a higher value upon the physician's advice and skill, as distinct from the remedies he employs, than it does now; but if we judge from the extent to which proprietary medicines are employed at present by the very best people, intellectually considered, in this country and Great Britain, in the treatment of chronic diseases, and acute illness that does not last more than a few hours, or confine to the house, our sanguine friends will not be likely to live until their hopes are realized. If those who spend so much time in adjusting the relations which exist between the professions and the public, would devote their energies to the advancement and dissemination of professional knowledge within their own midst, and leave the public to take care of themselves—as they are pretty certain to do in any case—we think that the public would be better served and the professions more honored than they now are, although some persons might lose opportunities for distinguishing themselves as reformers and public benefactors.

Our friends in Minnesota are experiencing the results of "class legislation" in a way that is likely to cure them of any lingering respect which they may have for the intelligence of the average legislator. It seems that the Legislature of that State has enacted a law which imposes a tax of ten dollars on every druggist, for the support of the State Inebriate Asylum. The law is absurdly unjust, as it appears at first sight, but further consideration makes us think that our friends must have been attempting "class legislation" in their own interests; and the Legislature, finding the monopoly granted them had become so valuable that they were becoming rich faster than was good for them, have imposed the above tax as a prophylactic.

On Thursday evening, April 6th, a number of chemists of this city and vicinity, met at the lecture-room of the College of Pharmacy, University building, for the purpose of organizing a National American Chemical Society. Several gentlemen present disapproved of the proposed plan, mainly for the reason that New York already has a society, where chemistry was represented as an important sub-section, and where nearly all working chemists of the city are in the habit of meeting for the interchange of scientific opinions; they doubted whether it were wise to undertake the organization of a new one. The arguments brought against them, however, were in the main of so convincing a nature, and the utility or even necessity of the measure to bring about a union of all chemists of the country in one great society was so apparent, that the proposition to proceed with the organization was passed with a nearly unanimous vote. Prof. Chas. F. Chandler, who had been selected to preside at the meeting, then read the draft of a constitution and by-laws, which had previously been drawn up, to save time. The sections were discussed in all their bearing, amended where necessary, and finally adopted. A committee of five gentlemen were appointed to nominate the first list of officers, which was submitted to the meeting after a recess. The names proposed include well known scientists, as Professors W. H. Draper, Barker, Gibbs, Hilgard, and others, and have been selected with the especial view of imparting to the society a national character. Any chemist, who shall, either in person or by letter, (to Dr. Isidor Walz), have given his assent to the constitution and by-laws before the next meeting (Thursday, April 20th, at

same place), will be considered as entitled to participate in the first election.

THE SEX has turned its attention to the pill-tile and mortar as a means for a livelihood. Our last issue recorded the achievements of one lady in England; and recent exchanges from Philadelphia say that the Woman's Medical College is to embrace instruction in Pharmacy in its curriculum, and that the Philadelphia College of Pharmacy has female students.

THE TABLE which we present with this number to our subscribers, is based upon the latest standards of comparison between metric weights and those in common use in the United States. It has been made to meet an almost daily want among pharmacists and physicians who make any effort to keep themselves informed of the current literature of their professions, or who desire to use the metric system in their work; and we hope it will be found, as we believe it to be, thoroughly accurate.

New York Drug Market.

[*Prices given are for round lots from Importers' and Manufacturers' hands. For single packages an advance would be charged.*]

A somewhat better tone seems to pervade the wholesale trade, and the cerulean hue that has long pervaded the countenances of importers and manufacturers of drugs and chemicals has given place to a more hopeful cast. Not that there seems to exist any very decided cause for improved spirits, except that some few articles have advanced quite sharply, and from some sections of the country a better demand has sprung up. Merchants, like actors, are mercurial and sympathetic, differing only in degree, and we think much of the good feeling is owing to the existence of these two qualities; for, if many merchants would pause and consider carefully the condition, as to profit, of their merchandise, their thoughts would be anything but pleasant. But any change for the better, be it ever so slight, is a great gain now-a-days; and we would bid the merchants make the most of their successes, and trust that they may thus gradually affect the entire trade of the North and East, for it is in these sections that the depression seems to last longest and be the hardest to remove. In the West and South the druggists seem to be doing a lively business, if their orders here are any criterion, and we sincerely hope the North and East may soon be in the same prosperous condition.

Opium has been firm but quiet since our last, there being no material change in the Smyrna market and no speculative movements here. The growing crop is reported as doing well, and if uninjured by rains or hot winds, will turn out about 6,000 cases. Should this be the case, lower prices will be reached. Should any material damage happen, the present price of $5.25, gold, will be a very low one, as speculation will be almost sure to force prices higher.

Morphia is steady and in active demand at $4.10 by the case from manufacturers' hands.

Quinia is unchanged in price, but there seems to be less demand.

Quicksilver has declined, and has been sold in lots of 100 flasks as low as 62½c., gold, which price seems to be the market now. Some holders, however, ask as high as 65c., gold, as the article is firmer and higher in San Francisco.

Borax is in moderate demand at 11½ @ 11¾c. for city refined, and 11¼c. for California; being a shade lower than last reported.

Blue Vitriol in fair demand, at unchanged prices; selling as wanted from first hands at 8 @ 8¼c.

Copperas is in better demand for druggists' uses, and is selling in 5 bbl. lots at 1 @ 1¼c.

Citric Acid without change, and selling as wanted at 78 @ 79c., gold. English makes have been arriving recently, but not to sufficient extent to influence prices materially.

White Sugar Lead, a shade lower, but in good, active demand, principally from printing mills however. Large contracts have been made at 17½ @ 18c.

Camphor, as foreshadowed in our last, has advanced, and 27c. is demanded for lots. In fact, manufacturers are not anxious to sell largely even at that price, the stock of crude being small. A brisk demand would, no doubt, advance prices still further.

Chlorate of Potassium somewhat lower, and sales of good brands have been made down to 21½c., gold, which price is now demanded for large lines.

Iodide of Potassium a shade lower, being quoted in bulk at $2.25, and bottles at $2.33 for P. & W. and C. P. & Co.

Carbonate of Ammonium is steady and without change; English selling as wanted at 13½c., gold, and Dodge & Olcott's American at 17½ @ 18½c. ccy, for bbls., and 18½ @ 20c. for jars, jars extra.

Cuttle-Fish Bone has again become scarce and has been largely sold, holders now demanding 26½ @ 27c.

Venice Turpentine shows but little activity and no change from previous quotation, being nominally held at 17½c.

Burgundy Pitch somewhat easier, owing to arrivals, and the nominal price of 7¾c. could be shaded for round lots.

Balsam of Copaiba has been largely sold, and all the available stock concentrated into the hands of a few holders, so that the price has been forced up to 75cts.

Balsam of Tolu is in small stock, and held principally by one house, who demand $2.50 for case lots.

Aloes, Cape, are scarce and higher, the price now being 13¼ cts @ 14 cts. Barbadoes, in gourds, 26 cts @ 28 cts. Socotrine 40 @ 60 cts, all in fair demand.

Cubebs are rather scarce and somewhat higher, 10½ cts @ 11 cts being the price for prime quality.

Squills, owing to recent arrivals, are somewhat lower, and have recently sold as low as 11 cts for prime dry and white.

Senna. Alexandria sorts held at 16 cts. Some new crop Tinnivelly recently arrived is held at 20 @ 25 cts. Prime quality old crop can be had for 13 @ 16 cts.

Manna S. F. in good supply, and prime new crop held for 45 cts with sales at that price. Some new crop Large Flake just received sold for $ 1.00.

Gum Assafœtida is very firm, there being a good demand, and importers are not anxious to force sales. We think it only a matter of some little time before higher prices are obtained for this article, as the present price is an abnormally low one. In fact some qualities are firmly held for 15 cts., being a little higher.

Gum Guaiac. is in good supply at 35 @ 40 cts. Some handsome quality tears can be had for 50 cts.

Gum Arabic of all grades is in good stock, and sales are made with difficulty. Much of the Gum now sold for picked is mixed with a kind of Senary, which cheapens it at the expense of quality.

Arnica Flowers quiet and in slight demand. Price is 12 cts, being a little lower than last reported.

Chamomile Flowers. New German have arrived, and are held at 38 @ 40 cts. Belgian and Saxony unchanged.

Ginseng is in better demand, exporters buying more freely. For good quality Southern $1.30 has been paid, while Western brings $1.25.

Seneka Root lower, in view of the coming crop, which will soon be arriving. The price is nominally 75 cts for Western, but that price would have to be shaded to sell any quantity. Southern Root would bring a little higher price.

Ipecac. without material change, price being about as last reported $1 Gold.

Colombo Root of prime quality is in small stock and held for 10 cts. Lower grades can be had for less money.

Tonga Beans are quite firm at $1.50 for prime Angostura.

Vanilla Beans in better demand at from $16 @ $19 as to quality. Holders of prime quality are quite firm, as the new crop of this description is reported small.

Jalap has reached a very low price, and can be had from importers' hands at 10½ cts gold. This is perhaps lower than has ever been reached for this article.

Gentian Root is in small stock, and holders are demanding 7c., in view of the small quantity to arrrive, and here. New crop cannot arrive for several months.

Rhubarb in improved demand, and at price somewhat firmer, as the London market has advanced from 10 to 20c. per pound.

Canary Seed, owing to recent large arrivals, is very much lower, and good Smyrna Seed can be had for $6.50 per bushel.

Carraway Seed, 10c. @ 11c. for prime German and Dutch.

Hemp Seed in good stock, and slightly lower prices prevail. For prime Russian $1.90 is asked.

Oil Lemon has been quite active, and very large sales have been made as low as $2.75 gold for Sanderson's. The Messina market has also been quite active, and prices have advanced quite sharply. At this writing Sanderson's is firmly held at $3.25 gold and N. A. & Co.'s $3.12½ gold.

Oil Bergamot has also been quite excited, and prices advanced considerably. The price of $3.00 gold for Sanderson's stimulated demand and speculation, both here and abroad; and now the price is very firm at $3.60 for Sanderson's, and $3.37½ for N. A. & Co., both gold.

Oil Anise has declined still further, and stocks being large, lower prices are expected. The nominal price is $1.70 gold for case lots.

Oil Cassia somewhat higher, owing to advices from China of a small stock there. Price is nominally $1.00 gold, at which some holders refuse to sell largely, preferring to hold for a further advance.

Oil Sassafras very firm at 55c. for cans. Arrivals recently have been small, and should they so continue, a higher price must be reached before long.

Oil Peppermint weaker and lower. H. G. H. selling at $4.12½; L. B. H., $4.00.

MATERIA MEDICA.

On Defects in the Domestic Measurement of Doses.

DR. ROBERT FARQUHARSON, Lecturer on Materia Medica at St. Mary's Hospital Medical School, writes as follows to the *British Medical Journal* of Feb. 26.

"The scrupulous accuracy with which prescriptions are made up by the highly educated dispensers who are now entrusted with this duty, perhaps tends to make practitioners careless regarding the exact mode of administration of their drugs. For convenience in out-patient departments, the time-honored teaspoon or tablespoon is invariably recommended for the division of doses; and we console ourselves for our want of scientific precision by the belief that these domestic measurements usually correspond to certain definite standards laid down in our text-books. Sometimes, however, we find complaints made that our medicine will not last out the week; and, on inquiry, we find that the patients have consumed

Azor Thurston

nearly double the proper quantity during that time, although they have conscientiously endeavored not to exceed the regulated number of tablespoonfuls. This happens so often and is productive of so much waste and annoyance, that I have lately, with the kind assistance of Mr. Marriott, dispenser to the Western General Dispensary, made a careful inquiry into the capacity of our common domestic measures with the following results.

I will first consider drops which are in occasional use, and which are held in a vague way to be about equal to a minim, although the more educated student of pharmacy would probably tell us that, on an average, they are only equal to half that quantity. Of

	Drops		Minims.
Distilled water	56	represent	60
Tinctura opii	113	"	60
Tinctura digitalis	114	"	60
Liquor morphiæ hydrochlor.	100	"	60
Oxymel scillæ	80	"	60
Syrupus papaveris	75	"	60
Glycerine	45	"	60
Spiritus ætheris nitrosi	114	"	60
Tinctura camphoræ comp.	112	"	60
Acidum sulphuricum dilutum	55	"	60
Oleum ricini	55	"	60
Spiritus terebinthinæ	110	"	60
Oleum anisi	100	"	60

The next point is to inquire in how far the size of the drop is influenced by the shape of the bottle in which the fluid is contained. The experiments just noted were all made by means of an ordinary beaked minim-measure, and I found barely a shade of difference between this and a small phial brought by a dispensary patient. But, on making comparative observations with tinctura opii, I obtained the following variations from my original estimate of 113 drops to 60 minims. Out of the ordinary surgery bottle I obtained 83 drops to 60 minims, and from a large twelve-ounce bottle in the possession of a patient 93 drops became the equivalent; and, although these differences are considerable enough in themselves, the bottles in ordinary use differ but little from one another, and it will therefore be seen that the quality of the fluid is the main factor in regulating the relative size of the drops.

But drops, after all, are comparatively seldom used, and the universal engine for the division of doses is the tablespoon, which homely implement is always at hand, and is held to represent a certain fixed quantity. In a series of seven, selected at random, and apparently differing very widely in shape and in size, I discovered the following remarkable variations. No. 1, contained six drachms; No. 2, six drachms; No. 3, eight drachms; No. 4, eight drachms; No. 5, eight drachms; No. 6, five and a half drachms; No. 7, five drachms.

It was found that a difference of from one to two drachms is made by the spoon being only moderately or completely filled; and of any oily fluid, at least an additional drachm can be readily added. The result, therefore, that even the smallest tablespoon does not hold less than five drachms, and that the largest contains at least an ounce, must completely alter our notions of prescribing; for we can surely no longer pin our faith to the regulation quantity of half an ounce, which this domestic measure is usually believed to contain. The dessert-spoon was found to be equal to from four to six drachms; whilst four specimens of teaspoons were found to contain respectively, eighty minims, ninety minims, and two drachms. The wine-glass must complete the series; and, in four experiments, No. 1 was found to hold three ounces and two drachms; No. 2, two ounces and six drachms; No. 3, three ounces; No. 4, two ounces and a half; and No. 5, two ounces and two drachms—thus exceeding pretty considerably in every case the regulation quantity of two ounces. So much, then, for the safety and accuracy of the modes of measurement most commonly employed.

It would clearly be difficult, if not impossible, to expect any reform in this direction to come from the overcrowded hospital out-patient rooms; but it is not too much to insist that, in the wards and in private practice, graduated measures should invariably be used as a matter of routine. We shall thus secure, not only greater safety in dealing with poisonous drugs, but greater scientific accuracy in any therapeutical observations we may wish to make upon our patients. But tablespoons which hold an ounce, and wine-glasses which hold more than three ounces, can hardly be said to fulfil either of these necessary requirements.

In the *British Med. Jour.*, Dr. Wm. Frazer, of Dublin, says: "I invariably order, with all important medicines, an empty phial to be sent to contain the exact dose required. As a rule, a half-ounce phial is most convenient, for it indicates the medical table-spoon; a two-drachm phial answers for the dessert-spoon; and the ounce phial, of course, speaks for itself. I have found no cause for complaint about doses since adopting this simple plan, one of the principal recommendations of it, next to its accuracy, being its extreme cheapness."

Princewood Bark: a Febrifuge from the Bahamas.

Under the name of Princewood, two distinct plants are generally known, both of which are natives of the West Indies; one is the *Cordia gerascanthoides*, Kth., a small tree, some twenty or thirty feet high, belonging to the natural order Boraginaceæ, and the other is the *Hamelia ventricosa*, Sw., likewise a small tree, but belonging to a totally different natural family, namely the Rubiaceæ. These Princewood trees are both noted in the West Indies for their timber, which is produced of sufficient size to yield boards for table and cabinet work. The wood of the *Hamelia* is said to be somewhat soft, but to resemble in grain the elm, from which circumstance it is some-

times called Spanish elm. Whether the Princewood of commerce, which is used in England chiefly for inlaying and turning, is the produce of either or both of the trees mentioned above, it is not easy to say; they all agree pretty well in color, which is a lightish brown, but the dark-brown markings of the *Cordia* are broader and usually more bold, than they are in the Princewood of commerce. It, however, is said to be imported from Jamaica, which would lead to the supposition of its being the produce of one or other of the trees referred to, or of one closely allied. That the name Prince or Princewood is not confined to the genera *Hamelia* and *Cordia* is proved by the receipt recently at the Kew Museum of samples of bark from the island of Andros, Bahamas, under the name of Princewood bark. This bark was described as the produce of a shrub or tree growing abundantly on the islands of Eleuthera and Andros, scantily on the island of New Providence, and probably on many of the south-eastern islands of the colony. It is said not to be found, however, at Grand Bahama. The bark was described in the letter accompanying the specimen as possessing both astringent and tonic properties to such a degree as to make it quite a popular remedy in the Bahamas for those complaints which affect the mucous membrane of the bowels. Upon receipt of this bark, and being guided by the common name, and the tonic properties attributed to it, our thoughts naturally led us to the genus *Hamelia;* fortunately, however, some fruits of the tree yielding the bark accompanied the specimen, and from them it was easy to determine that the plant was no *Hamelia*, but *Exostemma Caribæum* R. S. This is described by Grisebach in his "West Indian Flora," as 'a fragrant shrub, ten to twenty feet high,' widely distributed in Jamaica, Antigua, Dominica, Trinidad, Cuba, Mexico and Guiana. It has been known as the Jesuit's bark of Jamaica, and in that island is sometimes called the Sea-side beech. The bark is smooth, of a deep reddish-brown, but somewhat greyish on the outside; under an ordinary lens, numerous small crystals are seen distributed over its surface. It breaks with a short woody fracture. In flavor it is at first sweet, changing to an astringent bitterness. A small portion put in cold water quickly tinged the water, which in about ten minutes became as deep a color as dark brandy. After standing a few hours, the water became nearly opaque with a strong earthy smell and bitter taste. This bark, together with other species of the same genus, seem to be well known in the West Indies for their bitter qualities. Grisebach says: "Of Quinquina only the spurious barks called Quinquina Pitou or China Caribæa occur in the West Indies—*Exostemma floribundum* and *brachycarpum*," so that the species under consideration seems to have escaped his notice, so far as its special medicinal properties are concerned.

Of other species of *Exostemma*, the barks of which are febrifuge, may be mentioned *E. cuspidatum*, a small tree, native of Brazil, where it is called Quino de Mato, and the bark is used as a substitute for cinchona; *E. corymbiferum*, a native of the islands of the Pacific Ocean, the bark of which is very bitter and astringent; and the *E. Philippicum*, likewise a small tree, native of the Philippine Islands, with a bitter medicinal bark.

So highly is the bark of the Bahamas Princewood (*E. Caribæum*) esteemed in these islands, that it has been suggested that the tree might prove valuable for acclimatization on the West Coast of Africa. Samples of the bark have been submitted to medical men in New Providence for examination and report.—*J. R. Jackson, A. L. S., in Pharm. J. and Tr.*

The Chemical Constituents of Angelica Root.

THE root of *Angelica Archangelica* L. has been repeatedly examined by chemists, first by John, then by Bucholz and Brandes, and most thoroughly by L. A. Buchner (1842). The former having recognized as principal constituents an ethereal oil (0.7 %), angelica balsam (6%) starch, etc., Buchner succeeded in separating the angelica-balsam into a volatile oil, a peculiar volatile acid (angelic acid), a waxy matter, a crystallisable body analogous to imperatorin, peucedanin, etc., to which he applied the name *angelicin*, and an amorphous resin. He also found in the root a considerable quantity of crystallisable sugar.

This substance, *angelicin*, has lately been examined by C. Brimmer, who has obtained interesting results. He found, namely, that this substance was identical with *hydrocarotin*, which had been discovered by Bödeker in carrots (*Daucus Carota* L.) and investigated by A. Husemann. The name hydrocarotin was chosen, because it contains 6 atoms more hydrogen ($C_{20} H_{30} O_2$) than the accompanying substance *carotin* ($C_{20} H_{24} O_2$).

The principal properties of hydrocarotin are: Large, colorless, flexible, rhombic plates, tasteless and odorless; floats upon water, becomes hard and friable at 100° C, heated over 100° turns yellowish and softens, melts at 126.5° C without loss of weight, and on cooling congeals to a resinous mass. It is insoluble in water, soluble in boiling alcohol, from which it almost entirely separates on cooling, very easily soluble in ether, carbon disulphide, chloroform, benzole, and oils. Concentrated sulphuric acid dissolves it with bright red color, from which solution it is again thrown down by the addition of water.

Brimmer conjectures the presence of hydrocarotin in other umbelliferous roots, besides Daucus Carota and Angelica Archangelica; this family having another body in common, namely *umbelliferon*, which Sommer has obtained by dry distillation from the resin of almost all umbelliferous plants.

The sugar contained in the root was ascertained to be cane sugar.—*Zeit. d. all. öst. Ap. V.* 1876,73.

On Incense-Resin.

THIS resin, which is also known under the name of *Hyava-gum*, is the product of the Hyava or Incense-tree of British Guiana.* Its balsamic odor is owing to a small quantity of ethereal oil. It is almost entirely soluble in alcohol, but various samples differ very much in external aspect, some being yellowish and quite soft, others white and crystalline.

Conimen.—To obtain the volatile oil, J. Stenhouse and Ch. E. Groves distilled the resin with large quantities of water, or in a current of steam. A thin layer of oil collected in the condenser, which was allowed to separate completely from suspended water by standing. Most of it passed over at 260–275° C. (500–527° F.), and in order to free this hydro-carbon from all oxygenated compounds, it was digested with bright metallic sodium, separated and distilled. This treatment having been repeated five or six times, the oil was subjected to fractional distillation. It began to boil at 150° C. (302° F.), but the temperature rapidly rose to 255° C. (491° F.). After repeated distillation from sodium, about one-half of it was obtained as pure hydro-carbon of constant boiling point, 264° C. (507.2° F.) Its composition was ascertained to be C_5H_8, and owing to its relationship to the group of terpenes, the name of *conimen* is proposed for it. This is a colorless mobile liquid, nearly insoluble in water and miscible with alcohol, ether, and benzole. It has a fragrant odor, and burns with a smoky flame.

Crystalline Conima-Resin.—The solid residue left after the distillation of the oil was dried and digested with six parts of strong alcohol; the solution on cooling deposited the *crystalline* resin in silky needles, which were purified by recrystallizing from hot alcohol, and were obtained in colorless crystals, amounting to about 20 per cent. of the crude resin. In order to obtain it entirely pure, it was dissolved in 25 parts of hot benzine (boiling below 95°), and filtered while hot. On standing, the substance separates in bundles of brilliant-white needles, which are finally once or twice more recrystallized from alcohol. They melt at 175° C. (347° F.) and have the composition $C_{48}H_{76}O$. They do not appear to possess acid properties, are insoluble in water, more soluble in hot alcohol or benzine, easily in ether, carbon disulphide, and hot benzole. The name of *icacin* is proposed for this substance.

The *amorphous* resin is yellow and very easily soluble in alcohol; it is obtained by evaporating the mother-liquid left after the separation of the crystalline resin.—*Ann. d. Chem.* No. 180, p. 253.

* *Icica heptaphylla*, Aubl.—Another native name of the resin is *Arou aou*. De Candolle refers to this tree the West Indian variety of *elemi*. The substance called *coumia*, which is also referred to it, is probably identical with "*conima*." The genus *Icica* (Therebinthaceæ) yields many varieties of balsams and resins, as *caranna*, *balsam of acouchi*, varieties of *tacamahac*, etc.

Animal and Human Alkaloids.

F. SELMI has discovered the fact that the brain and liver of man and ox contain an alkaloid which in its behavior resembles morphia very closely. In watery solution it has an alkaline reaction; it is insoluble in ether, soluble in amylic alcohol, reduces iodic acid, and strikes a blue color with ferric chloride; but it has no poisonous effects upon frogs. An exactly similar and perhaps identical alkaloid has been discovered by the same investigator in the green unripe (not in the dry) fruit-capsules of the red poppy *(Papaver Rhœas L.)*. Morphia yields with iodised hydriodic acid only *very slowly* microscopic crystals, which are permanent for *several hours;* while the new alkaloid under the same conditions produces crystals *at once*, which however *rapidly* disappear. The same chemist has discovered several alkaloids in human bodies, which had been exhumed after 1, 3, 6 and 10 months respectively, all of which alkaloids yielded characteristic crystals when treated with iodised hydriodic acid. Three of these alkaloids are non-poisonous, soluble in ether, and one of them separable by carbonic acid. Another, which is insoluble in ether, but soluble in amylic alcohol, is highly poisonous, producing in rabbits tetanus, strong dilatation of the pupil, paralysis of heart, and death. All these bodies answer to the general reagents for alkaloids, but undergo change when long exposed to the air. The presence in the brain and liver of an alkaloid having such close relationship to morphia in its reactions increases the difficulties in distinguishing or identifying the latter.—*Ber. d. deutsch. chem. Ges.* 1876, *p.* 195.

On Cassia Occidentalis and on Negro Coffee.

PROF. J. CLONET has had occasion to examine some seeds, exported from French African colonies, and sent to Havre under the name which they bear in their native place, and which we will call for the present "Negro Coffee." These seeds, which have been used in some countries as a substitute for coffee, are derived from *Cassia occidentalis* L., a native of India and Cochin China; also found in the West Indies and very abundantly on the coast of Africa. [It is sometimes called Jamaica Piss-a-bed, or Stinking weed.] Their chemical examination yielded the following results: fatty matters (olein and margarin) 4.9, tannic acid 0.9, sugar 2.1, gum 28.8, starch 2.0, cellulose 34.0, water 7.0, calcium sulphate and phosphate, chrysophanic acid 0.9, malic acid, sodium chloride, magnesium sulphate, iron, silica, together 5.4, and *achrosine* 13.58 parts in 100. The latter substance was obtained by exhausting the powdered seeds, previously treated with ether, by means of alcohol of 60%; the alcohol is distilled off, the syrupy residue treated with absolute alcohol, which dissolves out various constituents, leaving a solid brown-red mass, having when a dry, resinous fracture and being soluble in water, to

which it communicates a garnet color. It contains C, H, O, N and S, but its exact composition has not been determined; [it is most likely a mixture of various bodies]. It is soluble also in weak alcohol, and in acids and alkalies. The color cannot be fixed upon tissues by any known mordant. This circumstance induced the author to term it *achrosine*, or "not coloring" (ἀ + χρώζω), although being colored itself.

The whole plant is purgative, like others of the genus *Cassia*, which effect is ascribed mainly to the mucilaginous and extractive matters in conjunction with the chrysophanic acid; 6 grammes (92.6 grs.) of the leaves are an average dose for an adult; a larger dose is liable to produce emesis. The seeds are more active, and more rapidly emetic; some also ascribe to them a slight emmenagogue action.

One of the most useful properties of the plant is its febrifuge effect. The seeds have repeatedly been employed in France and in some West-Indian colonies for this purpose, chiefly in the form of vinous tincture, containing 60 gm. per litre of Malaga wine (about ℥ ij to Oij). An infusion of the root is considered by the Indians an effective antidote against various poisons.

It is not at all improbable that the use of the roasted seeds as a substitute for coffee will become extended. Torrefaction appears to destroy the purgative principle entirely, and an infusion of these roasted seeds is said to approach in flavor and taste so closely to genuine coffee as to be scarcely distinguishable therefrom. The supply is so abundant, that the price will be much lower than that of coffee.—*Répert. de Pharm.*, 1876. *Nos.* 2 *and* 3.

Cotoin.

Having given on page 39 (Febr.) a concise description of the so-called *China Coto* or *Coto* bark, together with Wittstein's analysis thereof, we are now enabled to lay before our readers the results of further investigations made by Jul. Jobst, who has discovered in the bark a crystalline principle, for which he proposes the name of *Cotoïn*. His method of preparation is the following:

Coarsely-powdered Coto bark is exhausted in a percolator by means of cold ether; the ethereal percolate, reduced to one-tenth of its bulk upon the water-bath, while still warm, is transferred to a porcelain capsule and mixed with six parts of petroleum-ether. Gentle heat is applied, until all ethylic ether has been dissipated, during which time large quantities of resin are deposited, and the supernatant clear warm liquid is decanted and set aside to crystallize. The crop of crystals is accompanied by a small quantity of resin which mostly adheres to the bottom, but there is no difficulty to separate the two, by stirring them about, and pouring off the liquid containing the crystals at the right moment. The latter are collected upon filtering paper, pressed to remove adhering mother-liquor, and several times recrystallized from boiling water.

The product consists of light yellowish-white crystals, forming square prisms, and possessing the biting taste of the bark in the highest degree. They are almost insoluble in cold, but soluble in hot water, and also in alcohol, ether, chloroform and carbon disulphide. Their melting point is 124°. Alkalies dissolve it easily with yellow color, and acids again throw it down from alkaline solutions. Concentrated nitric acid dissolves cotoïn with blood-red color, slowly in the cold, but rapidly when heated. Its aqueous solution has a neutral reaction. It reduces gold and silver salts in the cold. Basic acetate of lead produces a bright-yellow precipitate, while the neutral salt produces none. Iron salts produce in dilute solutions a brownish-red coloration; in concentrated solutions, a brownish-black precipitate is deposited; Fehling's reagent is reduced by it, slowly in the cold, quickly by heat. Its chemical composition is $C_{21}H_{20}O_6$, and it must be classed among the so-called neutral or indifferent proximate principles. It exists in the bark to the amount of 1—1½ per cent. Further experiments will be necessary to confirm the reputation it has so far gained as a specific in diarrhœa.——*Zeitsch. d. öst. Apoth. Ver.* 1876, p. 85.

Elæococca.

At the last meeting of the Academy of Sciences of Paris, M. Chevreul, the Dean of the Academy, gave an account of some interesting experiments in connection with an oleaginous substance obtained from the "Elæococca," a plant of Chinese origin. When this oily substance is exposed to the action of light in a violet-colored bottle, it becomes solidified; but, when placed in a yellow one, the oil remains liquid. From this, M. Chevreul attempts to explain the various effects produced on the brain by the transmission of light through frames of glasses of different colors, and suggests its application to the treatment of mental and other affections.

Hunyadi Janos Mineral Water.

The Hunyadi Janos mineral water is an aperient water from springs at Buda, of which the most eminent German authorities speak in very high terms, and which appears to be rising in popularity. The following are the latest analyses. In 10,000 parts were found: 160.158 sulphate of magnesia, 0.849 sulphate of potash, 159.148 sulphate of soda, 13.050 chloride of soda, 7.960 carbonate of soda, 9.330 carbonate of lime, 0.011 silicic acid, 0.042 oxide of iron, etc., 5.226 carbonic acid, free and half combined. Baron Liebig speaks of it as the richest water in aperient salts; Professor Virchow states that he has tried these waters on a large number of persons, with invariably good and prompt success. Spiegelberg, Friedrich, and Scanzoni, who have all used this water very extensively, speak of it as excelling all others

in the evenness and mildness of its effects. Aperient medicines generally are nauseous, and the absence of disagreeable flavor in this water, together with the very light doses in which it is efficacious (less than half that of other more disagreeable waters), makes it worth the notice of the profession, and is likely to ensure its general popularity.

Note on Myrrh and its allied Gum-Resins.

Mr. W. DYMOCK communicates in *Pharm. Journ. and Trans.* (Feb. 19.) some interesting information relating myrrh and some of its allied gum-resins. He says: The gum-resins I include under this head are, true African myrrh, Arabian myrrh, common African bdellium and opaque bdellium. These drugs are brought to Bombay from Africa, Arabia, and different parts of India for selection and dispatched to suitable markets in Europe, China, and other countries. The merchants who deal in myrrh and the gums which come from the north-east of Africa and southern Arabia have their chief houses in Bombay, and employ partners or agents at Aden and Makulla, the Aden agents also attend the great annual fair at Berbera on the opposite coast, and exchange English and Indian goods for myrrh, bdellium and other African produce. The bags and bales which contain the myrrh, when opened in Bombay, are found to be made up of—1st, a large proportion of roundish masses of fine myrrh; 2nd, a considerable proportion of small semi-transparent pieces of myrrh of irregular shape; 3rd, numerous pieces of dark colored myrrh mixed with bark and other refuse; 4th, a small proportion of an opaque gum-resin (Bdellium opaque of Guibourt?); occasionally pieces of resin (juniper) are also met with. In Bombay, the contents of the package are sorted; the best myrrh goes to Europe, the darker pieces form a second quality, and the refuse is exported to China, where it is probably used as incense. True myrrh is known in the local market as Kărăm. The opaque bdellium is called meena hărma and is used for the extraction of the Guinea worm. It is of a yellowish white color resembling ammoniacum, with hardly any odor, and a bitter taste.

From Berbera also comes bdellium. In the bales of this drug two distinct kinds are met with, viz.; ordinary bdellium, and a perfumed kind in small quantities. The latter occurs in irregularly shaped pieces, more or less flat, some of them having fragments of thick bark adherent, but not the birch-like bark which adheres to common bdellium. The color of the gum is dark reddish brown, but opaque yellowish white streaks are frequently met with in the semi-transparent reddish mass which forms the bulk of the drug. The odor on fresh fracture is powerful and pleasant, not unlike a lemon lollipop. The Arabic name is hăbăk hădee. I know of no Indian name. It seems to be considered a kind of bysabole (or bdellium).

From Makulla and Aden another kind of myrrh is received, the Arabian myrrh of the pharmacographia. The trade name of this drug in Bombay is meetiga; it is mostly sold in India as true myrrh, for which it might easily be mistaken by any one not specially acquainted with drugs. I am assured by the dealers that no true myrrh is ever received from Arabia. Indian bdellium, as far as I have been able to ascertain, comes chiefly from the Deccan. In general form and appearance it somewhat resembles the African drug, the pieces often having portions of papery bark attached to them; but the color is different, being greenish, and the odor, though similar, is more faint. Its value is one third less than that of African bdellium.

Araroba, a new Remedy for Herpes.

A SUBSTANCE, called *araroba*, has formed an article of export during the last twenty years from the port of S. Salvador de Bahia, being all shipped to Portugal, which consumed nearly the whole supply, with the exception of a small quantity, which found its way to England. Previous to that period the physicians of Lisbon, as well as the Portuguese apothecaries, were unacquainted with this drug, at least under the name of *araroba*. There is but little doubt however, that it is identical with a substance which was formerly brought from Bahia to Portugal, and from there to the Portuguese colonies, under the names of *pó de Bahia—póh de Bahia—póh Baia* ("Bahia-powder")—*pó de Goa* ("Goa-powder")—etc.; although Dr. Fayrer asserts that the substance in question, at least that used at Goa, Saigon, and Singapoor—is derived from a Malay source, while Kemps declares Goa-powder to be imported from Mozambique.

Without attempting to reconcile these different statements, so much at least is certain, that *araroba* (*-powder*), or *pó de Bahia* is highly efficacious in certain skin-diseases, as lepra, psoriasis, pityriasis, ecthyma, pellagra, etc, but principally against *herpes* (*circularis* and *circinnatus*.)

According to Dr. Bomfin, the araroba or arariba is one of the largest inter-tropical trees growing between 13° and 15° S. in the province of Bahia, chiefly in the forests of Valença and Camanu. It attains a height of 20 to 25 metres and a diameter of 5 to 6 m. The flowers are small and violet, the bark is smooth and dark green. [We are not able at present to give its correct botanical name.] The wood, while fresh, is of a yellow color, but turns dark with age. In this latter condition it may be easily reduced to powder, which has an irritant and caustic action. During 1868-69 Dr. Polasne de Champeaux, a French naval surgeon, had to treat a large number of cases of herpes at the hospital of Saigon, and found the only effective remedy to be the *póh Baia*; and in the *Arch. de médic. nav.*, May, 1872, the same observer says: "The *araroba* powder is as effective an anti-herpetic as the *póh Baia*, if it is not identical with it." *Araroba* seems to have been used as a domestic remedy in Brazil, and the

best form of application is according to Dr. Silva Lima, an ointment prepared from 20 to 30 grs. (1.29–2.59 gm.) of araroba-powder, 10 drops of acetic acid, and 1 ℥ (31.1 gm.) of lard.—*Dr. Ullersberger in N. Rep. d. Pharm.*, 1876, p 53.

"Universal Disinfecting Powder."

The *British Medical Journal* notices a disinfecting powder, made by Messrs. Ledger & Co., which Mr. Wanklyn, a public analyst, says, has the following composition :—"The powder contains 70 per cent. of mixed chloride of sodium and chloride of calcium, and about 6 per cent. of anhydrous sulphate of zinc (equal to about 12 per cent. of hydrated sulphate), a little insoluble matter, and 15 per cent. of moisture."

The powder is comparatively non-poisonous ; will stop putrefaction at once, will absorb the volatile ammoniated products of decomposition, and render them innocuous ; it will act in the same way with sulphuretted hydogen, and thus it fulfils all the functions of an efficient disinfectant. It is highly soluble : 90 per cent. of it being completely dissolved in water ; and it is applicable in either powder or solution.

PHARMACY.

Iodine as an Impurity in Nitric Acid.

Mr. Friedburg having stated in a paper read before the German Chemical Society, that on treating carbon disulphide with fuming nitric acid, he had observed the former to assume a rose-red or violet color, which he ascribed to some impurity in the C S_2, Mr. P. Marquart replies that commercial nitric acid nearly always contains iodine, which may easily be shown by subjecting it to distillation to dryness. During the end of the process, violet vapors are frequently given off, and handsome crystals of iodine are found in the neck of the retort on cooling. In order to convince himself whether the coloration of carbon disulphide, when treated in the above mentioned manner, was really owing to the presence of iodine, he agitated a sample of fuming nitric acid, chosen at random, with carbon disulphide, added water and found the CS_2 colored rose-red. Treated with water and dilute sulphurous acid, it lost its color, and the aqueous solution gave the usual reactions for iodine with starch, and palladium nitrate. A specially prepared acid, known to be free from iodine, when shaken with carbon disulphide imparted no color to the latter whatever. When searching for iodine in this manner, it is immaterial whether the water be added to the previously separated carbon disulphide, or to the mixture of the two substances. If iodine is present, the color appears invariably and at once.—*Ber. d. Deutsch. chem. Ges.* 1876, p. 127.

Remarks on Impure Potassium Iodide.

Mr. Thos. F. Best, F.C.S., sends the following communication to the *Pharm. Journ.* and *Trans.* of March 11 : Some samples of potassium iodide having been lately submitted to me, for analysis, I beg to call the attention of the trade generally to the presence of an excess of alkali in them(consisting chiefly of carbonate), tabulating the same in their percentage order of impurity ; No. 1 contains 5.55% No. 2——5.35% ; No. 3——2.32% ; No. 4——1.78% ; No. 5——0.53%.

Though the last on the list may be considered a comparatively small excess, still it is higher than it should be. From my own practical experience I would remark, that commercially pure iodide should not contain more than from 0.15 to 0.20%.

In a medicinal point of view, I suppose 5 or 6 per cent would not much deteriorate its physiological action, especially if previously neutralized with a little dilute acetic or hydrochloric acid, as suggested by Mr. Groves.

On the other hand, should such impure iodide be supplied in lieu of the pure article, it may injure the reputation of an analyst or a dispenser. Another point concerning this excess of alkali. Where dispensers have insufficient time for examining their chemicals and drugs, it becomes a constant source of annoyance, precipitating ingredients which ought otherwise to be kept in solution, and thus again altering the nature of the prescribed mixture.

Detection of Hydrocyanic Acid.

The following is M. Carey Lea's method for detecting hydrocyanic acid : A grain or two each of a pure ferrous salt (ammonio-ferrous sulphate answers) and uranic nitrate are dissolved in half an ounce of water. Two or three drops of the mixed solution are placed on a clean white porcelain capsule, and a drop or two of the liquid to be tested is made to slip slowly down. If a cyanide be present, a purple precipitate (in very dilute solution, greyish-purple) is produced. Cobaltous nitrate may be substituted for the uranium salt, and gives an almost equally delicate reaction.

The delicacy of the Prussian blue test may also be very much heightened by appropriate precautions ; the best method is as follows : a weak solution of iron is to be made, containing a ferrous salt, to which a little ammonio-ferric citrate is to be added. Of this solution acidified with hydrochloric acid, two or three drops only are to be placed in a white porcelain capsule. A drop of the liquid to be tested is then allowed to slip down the side of the capsule, and this, meeting the iron solution, will produce a blue cloudiness. Either of the above tests will indicate the presence of $\frac{1}{5000}$ of a grain of anhydrous prussic acid.

The ammonio-ferric citrate should also have the preference over the sulphate in testing the purity of potassium ferricyanide.—*Journ. Chem. Soc.* January, *from Am. J. of Science.*

On the Methods for Detecting Albumen in Urine.

A. HILGER has subjected the various methods for detecting albumen in urine to a comparative examination, and has come to the conclusion that Bödeker's reaction, viz.: precipitation of albumen in acetic acid solution by means of potassium ferrocyanide, deserves the most confidence, especially when other reagents have yielded doubtful results. He advises physicians in such cases to chiefly rely on the following three methods:

1. Test by means of nitric acid.
2. Coagulation by means of acetic acid.
3. Precipitation by means of potassium ferrocyanide in urine, containing acetic acid.

Prof. C. Neubauer adds that, according to his experience, the first of these tests is all-sufficient, if conducted in the manner proposed by Heller, namely by carefully pouring upon a layer of colorless nitric acid a similar layer of previously filtered urine (See his *Anleit. z. Anal. des Harns*, 7th edition, p. 76.)—*Zeitsch. f. anal. Chem.* 1876, 115.

Emulsions of Resins.

E. GASSER writes in the *Journ. de Pharm. d'Als.-Lorr.*: Every practical druggist knows how difficult it is, during summer, to prepare emulsions of resinous substances, especially of ammoniacum. The following method will be found to obviate this difficulty: Rub or compress the resin, as well as it may be possible, in a mortar; pour upon it first an equal weight of water, then double the quantity of alcohol and ignite the latter. As soon as the alcohol has all been burnt, add to the still warm mixture as much powdered gum arabic as the original amount of resin employed, stir briskly, gradually add the excipient or other ingredients, and the emulsion will be finished. This is a modification of Oppermann's method.

Iodized Cotton.

FINELY divided iodine (5 to 10 parts) is sprinkled between layers of loose cotton (100 parts) introduced into a tall glass-vessel, and the latter placed horizontally on a water or sand bath. As soon as vapors of iodine are seen to rise, and the air has been expelled from the vessel, the latter is tightly stoppered. On continuing to apply a moderate and uniform heat, the iodine rises in violet vapors, penetrates the cotton, and colors it yellow. After about two hours, the cotton will have assumed the color of burnt coffee, and the operation is finished.

Cotton iodized in other ways, as, for instance, by immersion in concentrated solutions of iodine in ether or carbon disulphide, retains merely traces of iodine, and most of it escapes with the vapors of the solvent. The above is Méhu's method.—*Journ. de Pharm. et d. Chim.*

Note on Persian Opium.

MR. W. D. HOWARD has recently examined a sample of fine Persian opium, sent to England as "perfectly pure," which yielded to him on analysis, without previous drying:

Morphine, crystallized from alcohol	10.40 per cent.
Codeine, anhydrous	0.29 " "
Narcotine	2.50 " "
Thebaine	0.57 " "
Cryptopine	0.09 " "
Papaverine	trace.

He is unable to say whether it contained any narceine. It was of a light brown color, and had been collected without the excessive use of oil.—*Pharm. Jour. & Trans.*, 1876, March 11.

Modification of Duflos' Method for the Separation of Iodine.

AMONG the processes in use for the separation of iodine from metallic iodides, the most reliable and trustworthy is that devised by Duflos, which depends upon the fact, that ferric chloride in contact with metallic iodides or hydriodic acid liberates iodine and is itself reduced to ferrous chloride ($Fe_2Cl_6 + 2HI = 2FeCl_2 + 2HCl + I_2$.) If this decomposition be performed in a small distillatory apparatus, the whole of the iodine is carried over along with the vapor of water, and may be received in solution of potassium iodide, in which it may afterwards be estimated volumetrically by the usual methods. The apparatus in which this process is conducted, generally consists of a small long-necked flask furnished with a glass tube bent at an angle of about 30 degrees and passing downwards into a vessel containing iodide of potassium solution. It is not made to dip into the solution, but to terminate just above its surface, in order to prevent the return of the solution into the flask on ceasing to apply heat. The whole of the receiver is moreover generally immersed in a vessel of cold water, which ensures a low temperature of the solution of potassium iodide, and therefore prevents loss of iodine on detaching the receiver. Owing, however, to the somewhat sluggish manner in which the vapors of iodine descend the outer limb of the delivery-tube, especially that portion which is inside the receiver, it is desirable to apply some agent which prevents its accumulation either as vapor, or, what is more frequent, as finely divided crystalline sublimate. I have for some time been in the habit of using a stream of carbonic acid passed through the flask as a means of accomplishing this purpose. A long-necked flask of the capacity of about 6 fl. $\frac{2}{3}$ (177.2 cc.) capacity is fitted with a rubber-stopper, previously entirely deprived of any accessible sulphur by repeated boiling in dilute potassa solution and thorough washing; two glass tubes are fitted into the stopper,

one for the passage of carbonic acid, the other for the escape of the volatilized products. The first tube is of such a length inside the flask, as not to touch the liquid contained therein, while in a slanting position, but merely to carry the current of gas over the surface of the liquid while boiling. The other tube, which must be of a sufficiently large calibre to readily carry off the vapors, is curved outwards, and in its descending portion connected with a separate detachable glass tube by means of (purified) rubber, and long enough to dip into the receiving vessel, while the other end terminates inside of the flask (which is supported in an inclined position) just at the under surface of the stopper. The delivery-tube is fitted into the receiver by means of a (purified) rubber-stopper, having an additional short tube for allowing the escape of air and carbonic acid. The receiving vessel containing solution of potassium iodide is surrounded by a current of very cold water. In using this apparatus the delivery-tube can be dipped below the surface of the solution of potassium iodide, without the risk of any return of the liquid into the flask on withdrawing the heat, owing to the current of carbonic acid, which prevents the formation of a vacuum. Besides, the same current pushes along the vapors of iodine and carries them into the absorbent solution quite rapidly. When no more vapors of iodine are observed, it is advisable to withdraw the heat for a short time, keeping up, however, the current of carbonic acid, and to reapply heat after a while ; I have frequently obtained additional though small quantities of iodine vapor from the flask. When the operation is entirely finished, the lower separate portion of the delivery-tube is disconnected, carefully rinsed into the receiver with solution of potassium iodide and the iodine now held by the latter in solution —representing the total of the iodine in the quantity of metallic iodide taken for analysis—is estimated volumetrically in the usual manner.

CH. R.

Sodium Arsenate.

G. FLEURY directs attention to the serious differences in water of crystallization, contained in various samples of this salt. When crystallized below 20°C. (68° F.), it contains 12 molecules of water, and this salt is the basis of the statements regarding dose and effects in our text-books. But when crystallized over 20°C., it only contains 7 molecules of water, and it has been found that most of the commercial salt has the latter composition.—*Arch. d. Pharm.*, 1876, p. 75, from *J. d. Ph. et de Ch.*

Adulteration of Pulvis Antimonialis.

MR. FRED. HEARNE reports, in *Pharm. Jour. and Trans.*, March 18, having recently met with several specimens of this preparation, supplied by London firms of good standing, which contained sulphate of calcium instead of the phosphate.

Preservation of Leeches.

MESSRS. Cubley and Preston, of Sheffield, write to the *Pharm. Journ. and Trans.* (Feb.): Sir,—In discharging a debt of gratitude to your correspondent "Hirudo" of Sept. 25, 1875, for his valuable hints on the "preservation of leeches," permit us to bear our testimony to the efficacy of his recommendations. We have tried several methods, and have lost hundreds of leeches thereby. We had a batch of 50, and kept them in plain water, which was frequently changed, but we lost all to about half a dozen when we came upon "Hirudo's" remarks. With the sickly six we placed about a quarter of an ounce of *sesquicarbonate of iron, and a handful of rather rusty nails.* The effect was astonishing—every one of the six recovered and became lively. Another batch of fifty have since been treated according to "Hirudo's" advice, with the slight exception, that three quarts of water were used and not changed for six weeks ; the water, when changed, seemed as good and fresh as on the first day, and the leeches continued lively and well, without a single loss.

Dr. Davy's New Test for Arsenic.

DR. Edmund Davy has proposed a modification of Fleitman's test for arsenic, or rather for arseniuretted hydrogen, which, for convenience, ease of execution and susceptibility, seems to leave nothing to be desired. The objections to Marsh's test are that the zinc or the sulphuric acid may contain arsenic, and may vitiate the test, unless previous trials be made for the purpose of ascertaining their purity. The apparatus required, especially where very small quantities have to be sought for, may not be within the reach of those who have not a tolerably well-appointed laboratory. Nothing can exceed Marsh's proof for elegance and accuracy when properly carried out, but it appears to the writer that the new plan is so satisfactory and simple as to warrant its introduction in by far the larger number of cases.

Fleitman recommended the production of arseniuretted hydrogen by the action of caustic potassa on zinc, in presence of arsenic. The gas evolved was made to act on paper moistened with silver nitrate, when a dark brown stain is produced by arsenic, but none by antimony; the latter metal not giving antimoniuretted hydrogen in alkaline solutions. To avoid the possibility of arsenic in the zinc employed, aluminium and magnesium have been recommended as substitutes. The galvanic test is, as Dr. Davy states, altogether too troublesome for general use. The writer has been in the habit of using Fleitman's test for some years, but, as stated by Dr. Davy it labors under the disadvantage of not giving off the arseniuretted hydrogen, unless with the aid of heat, and its accuracy depends on the purity of the zinc.

Dr. Davy uses sodium-amalgam, made by adding one part of metallic sodium to eight or ten

parts of gently warmed mercury, (this quantity of sodium seems to be too large, say one to twenty), whereby a solid amalgam is formed. Neither of these metals are at all likely to contain arsenic, and the latter may be easily purified by nitric acid, if necessary.

The substance to be examined, whether in a liquid or even in a solid form, such as copper arsenite, arsenate, aniline colors, arsenical sulphides, or even finely powdered arsenic itself, is introduced into a little water in a test tube and a piece of amalgam about the size of a grain of wheat introduced. The tube is then rapidly covered with a piece of paper soaked in silver nitrate, or a crucible cover moistened with a drop of the solution, which should be made by dissolving twenty grains of silver nitrate in one ounce of water, and adding two drops of nitric acid. The solution becomes of course at once alkaline, and evolves arseniuretted hydrogen, which, acting on the silver solution, produces at once, by separation of silver, a brown mark on the paper, or a silvery stain on the porcelain. To avoid any effect by accidental spirting, Dr. Davy recommends to cover the mouth of the tube with a piece of bibulous paper, and place the nitrated paper or porcelain above this.

One thousandth of a grain of arsenious acid in one cubic centimetre of water can be readily detected, and even one millionth after a short time.

Antimony, under similar circumstances, i. e., in alkaline solutions, gives no such result: hence it may be better to make the liquid strongly alkaline before adding the amalgam; but if acid (tartaric) be added, then antimoniuretted hydrogen is evolved and a very similar stain produced from silver antimonide.

These stains—by arsenic or antimony—may be very easily distinguished by soaking an ammonium sulphide, filtering off the solution obtained, evaporating to dryness, and observing the color of the residue and its behavior to hydrochloric acid. That from arsenic is yellow and insoluble, that from antimony, orange, and soluble in the acid.

It may be remarked that these stains are not due to deposition of arsenic or antimony, as in Marsh's test, but to formation of silver or silver antimonide; hence they do not totally disappear on treatment with potassium iodate (the writer's favorite test), or sodium hypochlorite.

The test has been tried in the writer's laboratory with most satisfactory results. The following salts have been examined and found to give most reliable indications. A most minute trace was, in each case, employed—probably not the hundredth of a grain. While paper moistened with silver nitrate gave, in some cases, almost imperceptible marks, those obtained from porcelain covers moistened with a drop of the silver solution, in all cases exhibited the reaction; more especially on warming gently. To make the experiments, very short test tubes or small porcelain capsules may be employed; in long tubes the result is not so satisfactory.

Scheele's green—a most minute trace.	
Schweinfurth green	" "
Arsenic (Cobalt)	" "
Copper Arsenate	" "
Ammonium-Magnesium Arsenate.	
Calcium Arsenate	"
Calcium Arsenite	"
Ferric Arsenate	"
Barium Arsenate	"
Arsenic Sulphides	"
Donovan's solution.	"

The writer has also tried Copper-nickel and Arsenical Pyrites (Mispickel) with most satisfactory results.

The test seems, therefore, to be one that while easily available is also exceedingly delicate.

H. H. Croft in *Can. Pharm. Journ.* April 1876.

The Essential Oil of Eucalyptus Globulus.

THE leaves of *Eucalyptus globulus* are distilled in Australia with water, whereby a yellow, heavy, fragrant oil is obtained, which, when exposed to the air, gradually becomes brown and resinizes. Cloez has recently found that the main constituent of this oil is a higher homologue of camphor, $C_{12}H_{20}O$, boiling at 175°, to which he gave the name *Eucalyptol;* the author, however, came to very different conclusions on examining three kilos of eucalyptus oil, the sp. gr. of which was 0.8762 at 12°C. By one or two distillations this oil was separated into portions, boiling below 186°, and above 200°, the former greatly predominating; by further fractionations this was found to yield no substance of absolutely constant boiling point; although the greater portion always boiled at 172° to 175°, a portion was invariably left boiling over at 180°. The distillate at 172° to 175° was finally distilled over sodium, whereby the boiling point was wholly confined within these limits, but little action being exerted on the sodium. This distillate proved to be a hydrocarbon, giving on combustion numbers agreeing with a mixture of a terpene and cymene. By boiling it with nitric acid of sp. gr. 1.4, diluted with two parts of water, paratoluic acid, melting at 178°, and terepthalic acids were produced, to the extent of 28 and 8 per cent. respectively. By treatment with sulphuric acid diluted with 4 parts of water, the terpene was polymerized, and cymene boiling at 174° to 175° was obtained; from this barium cymene-sulphonate, $Ba(C_{10}H_{13}SO_3)_2,3H_2O$, was prepared. This salt lost its water of crystallization at 180°, and was soluble in water to the extent of 2.35 grams of anhydrous salt in 100 of water at 14°; calcium cymene-sulphonate, $Ca(C_{10}H_{13}SO_3)_2\,2H_2O$, was also examined.

On comparing together the behavior of commercial turpentine oil with diluted sulphuric acid, and that of the eucalyptus hydrocarbons, the author

found that 1½ to 2 per cent. of cymene was formed in the first case, and 20 to 25 per cent. in the second.

A terpine boiling at 150° to 151° is also present in eucalyptus oil, the author having obtained a small quantity of distillate at that temperature giving numbers agreeing with $C_{10}H_{18}$; whilst an oxidized substance is also contained, boiling at 216° to 218°, and giving numbers agreeing with a mixture of substances, $C_{10}H_{16}O$ and $C_{10}H_{14}O$; to this the author applies the term "eucalyptol." When treated with phosphorus pentasulphide it yields pure cymene.—L. Homeyer in *Pharm. Jour. and Trans.*—From the *Journ. of the Chem. Society.*

The Employment of Snow and Hydrochloric Acid as a Freezing Mixture.

From some experiments made by MM. Pierre and Puchot, and recently reported to the French Academy, they have drawn the following conclusions respecting the use of a mixture of snow and hydrochloric acid as a refrigerant:—

(1) By mixing 2 parts of snow with 1 part of commercial hydrochloric acid the temperature can be lowered to — 32° C.

(2) By cooling the acid previously to mixing to — 15° or — 16° C. the temperature can be lowered to — 32° C.

(3) Acid supersaturated at — 16° or — 18° C. does not appear to present any advantage over ordinary hydrochloric acid.

(4) Although it is difficult to retain the temperature of a refrigeratory bath of snow and hydrochloric acid for any considerable time so low as — 34° or — 35° C., it is not difficult to obtain a persistent temperature of — 25° or — 26° C. by successive additions of snow and slightly cooled acid.

When the temperature shows too pronounced a tendency to rise, the subjacent liquor should be siphoned off and fresh snow and acid added. The siphoned liquor can be used to cool the acid before using it.—*Comptes Rendus and Pharm. Journ. and Trans.*

Hints and Warnings.

We desire to draw the attention of manufacturing chemists and of wholesale druggists to the absurd custom of sealing certain bottles of chemicals with *common red sealing-wax*, a habit which has at all times done more harm than good, and causes great annoyance to the consumer. It is only rarely possible to prevent the admixture of tittle particles of the brittle red wax with the contents of the bottle, while common beeswax would in all cases answer the same purpose without breaking up into a mass of chips and fine dust.—Another bad feature we have often noticed, is the use of wax where it *should not be used* at all, viz., in the case of packages of ether, chloroform and volatile oils, these liquids being able to dissolve portions of it, while flowing over the neck.—Finally, we would remind our friends that caution should be used in the storage and handling of potassium chlorate, which in itself is harmless enough, but when intended for the preparation of oxygen-gas, must be *absolutely free from organic combustible matters.* It should be remembered that a few sticks or pieces of packing-hay, or pieces of wrapping paper accidentally mixed with it, may cost a life or at least do serious damage. It is strongly recommended to keep this article separate from others in such a way that no foreign substance may by any possibility be mingled with it.

We would take occasion to warn our confrères of the insecurity of the common packages of phosphorus. Several instances have come to our notice lately where serious accidents have been escaped only by a miracle, the tin cans containing the phosphorus having become rusty and leaky, the water having escaped, and the phosphorus taking fire, or at least beginning to diffuse fumes. Keep your phosphorus-tins in water, or at least in a fire-proof place, buried in sand.

RECENT PAPERS.

Zeitsch. d. allg. œster. Apoth. Vereins. 1876, No. 2.—C. Frederking.—"On the Chemical Constitution of Chloride of Lime." [The author reviews the previous analyses and the prevailing theories of the composition of this substance, and gives the result of a careful analysis of chloride of lime containing 28 per cent. chlorine, which he found to consist of: calcium hypochlorite (14 per cent. Cl) 28.197, calcium chloride (14 per cent. Cl) 21.887, calcium chloride produced by HCl accidentally carried over 0.849, hydrate of lime 7.622, foreign ingredients and water 41.445, total 100.]—G. C. Wittstein. "On a Fallacious Reaction for Nitrous Acid." [Showing the fallacy of Kämmerer's test for nitrous acid, which consists of the addition of sodium bromate, starch, iodide of potassium and acetic acid. The reaction between these substances themselves is as follows: $NaBrO_3 + 5KI + 6C_2H_4O_2 = NaC_2H_3O_2 + 5KC_2H_3O_2 + 3H_2O + 5I + Br$.]—H. E. Schelenz. "On Jaborandi" (illustr.)

No. 3.—G. C. Wittstein. "Analysis of the Ash of the Bark of Sambucus nigra." [Potash 13.9, soda 0.9, lime 30.9, magnesia 10.7, sulphuric, phosphoric and silicic acids, 5.8, 8.0, and 5.4, alumina, chlorine, ferric oxide 0.7, carbonic acid 23.27 per cent.]

No. 4.—Ed. Hagenbach. "On the Sudden Fracture of Glass Vessels." [Owing to unequal density of different portions of the vessel. May be recognized by examining the glass in polarised light, when these portions will appear as highly colored streaks.]

No. 5.—Mermet's "Reagent for Sulpho-carbonates." [A freshly made dilute solution of an ammonio-nickel salt, prepared by adding to a small quantity of nickel sulphate or chloride, first ammonia in excess, and then enough water to make it appear colorless. This reagent strikes a currant-red color even with traces of sulpho-carbonates, a yellow color with polysulphides and a brown to black color with monosulphides of the alkalies.]

No. 6.—G. Krause. "On Boracit, or Stassfurtit." [Composition 2 $(3MgO + 4BO_3) + MgCl$, containing 62.57 per cent. of boric acid.]—J. Jobst. "On Cotoin," see page 104.

Repertoire de Pharmacie, No 2.—P. Vigier. "On Phosphide of Zinc, and its Therapeutic Use." [Zn_3P_2 con-

tains in 8 grains nearly 1 grain of phosphorus, but is not nearly as active as the equivalent quantity of P. The author thinks that this is due to its partial conversion into hypophosphite of zinc in the stomach. In preparing it, only pure redistilled zinc should be used, as the commercial zinc contains variable quantities of lead.]—BONDONNEAU. "On the Saccharification of Starchy Matters." [Each molecule of starch, according to the author's investigations, passes through the following stages:

	Rotary power.	Action of I.	In absolute alcohol.
Amylogen	216	blue	insoluble
Dextrine α	186	red	"
" β	176	colorless	"
" γ	164	"	soluble
Glucose	52	"	"

J. CLOVET. "On Cassia Occidentalis and on 'Café nègre.'" See pg. 103.

No 3.—CH. MENIERE. "Diminution in Strength of Fowler's Solution." [According to the French codex this preparation contains 1 per cent. by weight of arsenious acid. In the course of time, some of the oil and coloring matter separate, and crystals of arsenious acid group themselves around it; the author has collected 15 centigrammes of the acid from 100 gm. of the solution in the course of three years.]—F. CHATIN. "On the Cause of Failure in Testing for Small Quantities of Iodine." [The author insists on the necessity of precipitating lime and magnesia with pure potassic carbonate, evaporating the residual liquid, exhausting the residue with alcohol, evaporating the alcoholic solution mixed with a little water, gently igniting, if necessary, and redissolving in as small a quantity of water as possible.]—J. PIERRE and ED. PUCHOT. "A New Crystalline Hydrate of Muriatic Acid." [HCl, $2H_2O$.]—H. BRETET. "On Dragon's Blood and its Adulterations." [A great deal of adulterated or altogether spurious dragon's blood is in the market. The pure substance contains a small trace of iron, spurious ones seem a mixture of resin, ferric oxide and coloring matter. When pure it should be hard, yielding a fine red non-adhesive powder, and, when heated, should emit red vapors.]

No. 4.—GUICHARD. "On Fluid and Syrupy Extracts in France, England and America." [The author proposes the use of glycerine and water, exclusively.]—SERMANT. "On Zinc as an Agent to Prevent Boiler-incrustations." [Does not prevent them.]—G. WITZ. "On the Freezing of Mercury."—[By means of equal parts of snow and commercial muriatic-acid at—1°, which together produce a cold of —37.5°.]—CH. BOVET and E. GAUTRELET. "Remarks on a Case of Poisoning by Acid Chloride of Zinc."—[Examination of urine proved presence of large quantity of chlorides and hydrochloric acid, and a notable quantity of Indican.]—S. LIMOUSIN. "On the Solubility of the Bromhydrates of Quinia." [The neutral salt: $C_{40}A_{24}N_2O_4,2HBr,6HO$ is soluble in 9 parts of water at 15°C, while the basic salt, containing $C_{40}H_{24}N_2O_4,HBr,2HO$ requires about 700 parts. The latter salt is by some called *neutral*, and the first *acid*.]

Pharmaceutical Journ. and Trans. Feb.—W. J. CLARK. "Perchloride of Iron." [A review of the different methods of preparation in use or proposed, and on the results obtained by varying the proportions of the ingredients.]—J. MOSS. "Vaseline." [Analysis of this yielded: hydrocarbons (paraffins) 97.54, water 0.5, ash 0.05 per cent. Under the microscope it appears, especially when very cold, as a mass of minute needle-shaped crystals. Alcohol dissolved 15 per cent. It having been suggested to term it *Gelatum Petroleum*, Mr. Moss proposes as a substitute the name *Saxoleum inspissatum purificatum*, with the consolatory proviso, that the last word may (and probably will) be omitted.]—REES PRICE. "The Preparation of the Ferrous Phospate, P.Br." [Showing the uselessness of employing sodic acetate to neutralise the liberated sulphuric acid, as ferrous phosphate is *not* insoluble in acetic acid. The author finds that all the iron is obtained as ferrous phosphate by using three times the weight of sodic phosphate.]—J. MOSS. "Structure and development of the Pareira-Stem," (illustrated.)—W. A. H. NAYLOR. "Cosmoline." [Analysis yielded nearly the same figures as those given above for "Vaseline." By fractional distillation three distillates were obtained, No. 1, boiling between 160-170°C, No. 2, between 192-200°C, No. 3, between 230-240 C.]—M. H. STILES. The staining of wood sections—J. B. BATKA. Tacamahac and Anime Resins.—R. F. TUSON. "Chemical Analysis of an Intestinal Calculus from a Horse." [The concretion was found in the single colon; it consisted in 100 parts of—water 51.93, organic matter (hair, oat-husk, mucus, etc.,) 10.72, ammoniomagnesian phosphate 29.00, sand 5.53, salts soluble in water (sulphates and chlorides of sodium, potassium, calcium and magnesium) 2.82 parts.

Canad. Pharm. Journ. Feb.—E. B. SHUTTLEWORTH. "Some Notes on the Preparation of Phosphoric Acid." [Recommending the use of stronger nitric acid, under proper precautions. Proportions for 10 lbs. of phosphorus: at commencement 1 lb. P, 24 lbs. HNO_3 of spec. gr. 1.315, and 6 lbs H_2O. Additions are made from time to time of 1 lb. P and 8 lbs. HNO_3. Total quantity of HNO_3 required is 72 to 78 lbs. (67.72 lbs. theoretically).]

Am. Journ. of Pharm. Feb.—RUD. F. G. VOELCKER. "Raiz del Indico." [Analysis of a Mexican plant, supposed to belong to the natural order of Polygonaceæ; the author found: chrysophanic acid, aporetin, phæoretin, erythroretin, albumen, starch, tannin, oxalate of lime.]—R. V. MATTISON. "Factitious Balsam Tolu." [Reporting the analysis of a spurious balsam containing 75 per cent. of charcoal and storax, with admixture of bark of Liquid ambar orientale, and charred ligneous matter.]—J. J. BROWN. "The importance of Garbling Drugs."—M. S. BIDWELL. "A New Ink." [Recommending a solution of "Nigrosine" (an anilin-black) in water, 6 grs. to 1 fl. ʒ.]—ELI LILLY. "On a New Process for Phosphorus Pills." [260 parts of syrup are heated to 150° F. in a stout sound bottle, 6 parts of phosphorus added and the bottle well corked; when melted the phosphorus is by agitation divided into small globules, until syrup is cold; this is now quickly mixed with 340 parts of wheat flour. 1 grain of this mass contains $\frac{1}{100}$ gr. phosphorus.]—A. R. PRESCOTT. "Note on Frœhde's Reagent as a Test for Morphia." [Maintaining its reliability against some objections which had been made against it.]—J. P. REMINGTON. "On an Improved Pill Press," (illustrated.)—C. A. BOWMAN. "Glycerine Dropper." [A small wide-mouth bottle with a dropping tube projecting from the neck, and covered with a rubber finger-stall; pressure upon the latter drives the liquid from the orifice of the tube in drops.]—G. W. KENNEDY. "Tinctura Capsici." [Proposing the use of alcohol instead of dilute alcohol in its preparation.]—R. ROTHER. "Bismuth and Iron." [On the composition of the citrates, and behavior of the mixed citrates.]—J. U. LLOYD. "Note on Citrate of Iron and Quinia." [Recommending to dissolve quinia, precipitated at a low temperature, in solution of ferric citrate at 50° F.]—H. TRIMBLE. "Ammonium in Diluted Phosphoric Acid." [Four samples prepared by Prof. Markoe's process yielded respectively 0.0194, 0.0055, 0.0430, 0.0097 grs. of NH_4.]—J. M. MAISCH. "On the Asserted Presence of Tannin in Gentian Root." [Unfounded. Dark coloration with ferric salts is owing to gentianic acid.]—S. CAMPBELL. "The Ready-made Pills of Our Day."

The Use of the Decimal System of Weights and Measures has become compulsory in Austria since the commencement of the present year.

THERAPEUTICS.

On Salicylic Acid as an Antipyretic.

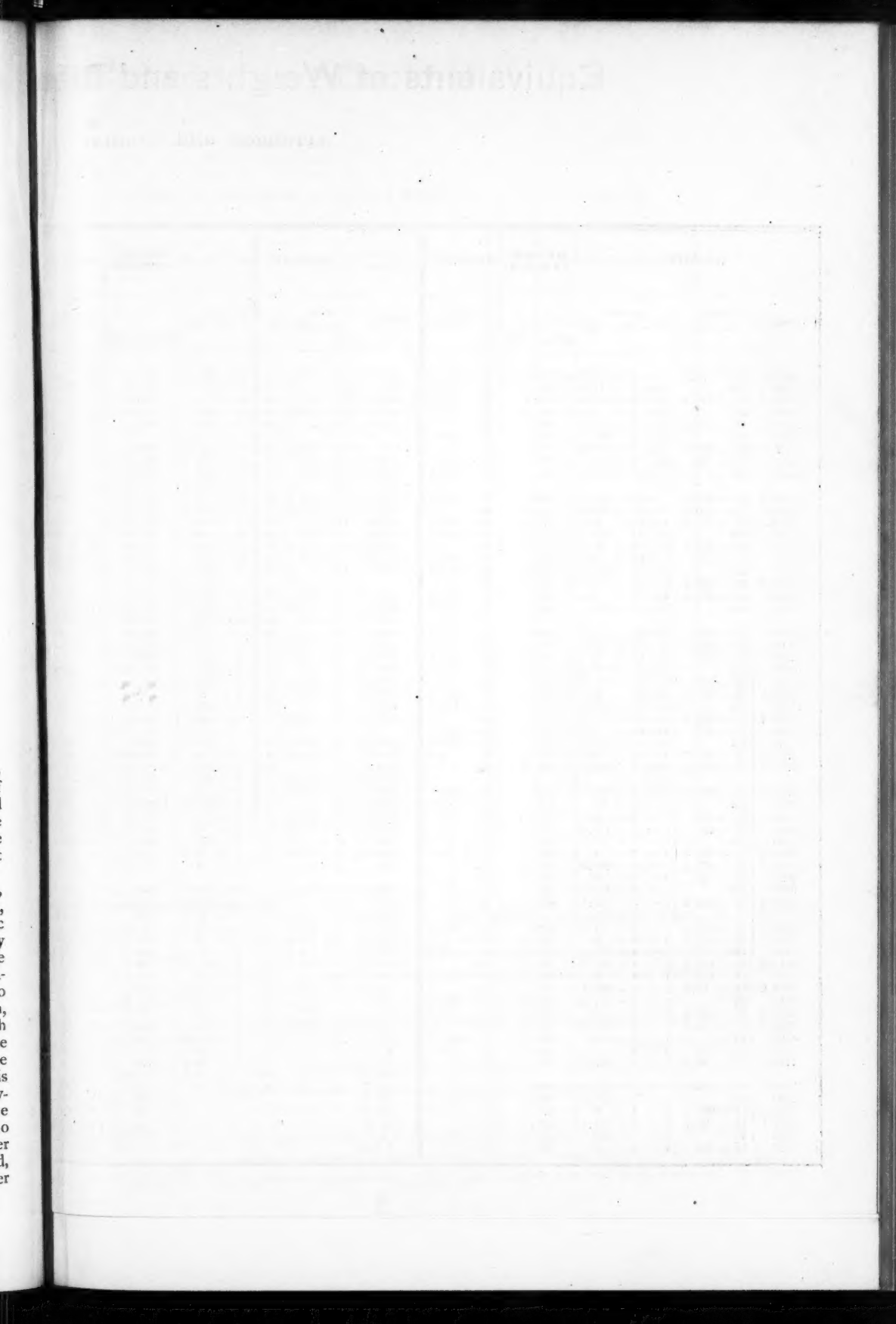
IN *The Practitioner*, of March, is an article by Dr. C. A. Ewald, of Berlin, on the antipyretic action of salicylic acid. His experience extended over upwards of one hundred cases, and the administration of from three hundred to three hundred and fifty doses. The most of his cases were of typhoid fever; the remainder comprising nearly all other diseases accompanied with high fever, and also cases of phthisis. The general action of the drug was the same in every case, the only difference being one of intensity.

Preparation and Dose.—It is a matter of indifference whether the pure acid or one of its salts (best the sodium salt) be used. As, however, impure preparations containing carbolic acid, etc., have a strong astringent and even caustic action, and since, in all probability, the acid undergoes conversion into the sodium salt in the blood, it is better to use the sodium salt at once. The dose should be a large one, as small and divided doses have but little effect. Generally speaking, the minimum dose required to reduce the temperature effectually is 5.0 grammes (77 grains). Should such a dose have no effect, we may, with safety, after four or five hours, give a second, or indeed even a third similar dose. Dr. Ewald has seen cases in which 15 or 20 grammes of the salt have been given during twenty-four hours without any ill-effect. The salt is readily soluble in water, and is taken by most persons without complaint. In those rare cases in which malaise or vomiting occurred, three or four drops of chloroform sufficed to remove them.

Action on the Temperature.—As a matter of course, the effect of the remedy was not the same in every case, but it proved more trustworthy and efficacious in its action than all other antipyretics. The results of one hundred single doses in cases of typhoid of nearly equal severity are given by Dr. Ewald. In order to test the value of the drug more accurately, it was always given at mid-day, before the usual afternoon rise of temperature. Almost immediately the temperature began to fall, the maximum result being reached, in most cases, from four to five hours after the administration of the medicine; but in some cases not less than eighteen to twenty hours were required. The subsequent rise was as gradual as the fall, but in mild cases it never reached the same height as before. These facts were established in many cases by thermometric observations made every ten minutes in the axilla and rectum. Where the drug had an effect the maximum fall, after its administration, was 4.3° C.; when it had none, the maximum rise was 1.5° C. The temperature at 5 o'clock on those days on which, at 12 o'clock, 5 grammes of salicylic acid had been given, was more than one degree lower than the temperature at 8 o'clock in the morning of the same day in 45 per cent., and less than one degree in 35 per cent. of the cases. On the whole, then, a reduction of temperature was observed in 80 per cent. The temperature was increased in 20 per cent., and in four cases the increase exceeded 1° C.

General Action.—Within fifteen minutes, or even less, after the administration, a copious perspiration breaks out, first on the face, then on the thorax, abdomen, and the rest of the body, accompanied by reddening of the skin, more especially of the face, and may be so copious that the patient may lose 500 to 750 grammes of water. Almost simultaneously with the outbreak of this sweating, sometimes a little later, the temperature begins to decline, the gradual fall lasting much longer than the perspiration. Nor is there, indeed, any constant relation between the fall of temperature and the amount of sweating, there being in many cases great reduction of temperature with little or no sweating. Generally the pulse and respiration are not at all affected, though the pulse may become a little slower. Where the pure acid or the sodium salt are employed, the intestinal tract does not appear to be at all affected. The recorded accounts of irritant effects on the mucous membrane of the œsophagus, stomach, or intestines, even of erosions and hemorrhages, are due to admixture of irritant substances such as carbolic acid. The evacuations become more frequent and fluid, and the acid appears in the urine as salicyluric acid. The cerebral functions appear little or not at all interfered with, nor does collapse occur as might be expected from the great fall of temperature. Neither Dr. Ewald nor others have ever seen a fatal case of collapse, and although several patients, especially such as have sweated profusely, appear during the fall of temperature, or shortly afterwards, much exhausted and very pale, this is rare and but transitory. He has not, however, been in the habit of giving the acid to very debilitated persons without giving at the same time stimulants.

Action in Different Diseases.—In pneumonia, erysipelas, acute exanthemata, phthisis, pleuritis, etc.,—diseases accompanied by acute or chronic fever—where the temperature has been reduced by the action of the drug, we see no change in the local processes. All authors, indeed, are unanimous in asserting its uselessness in ague. In two diseases only, typhoid fever and acute rheumatism, has no definite conclusion been arrived at, though Dr. Riess, who has had an experience of more than 400 cases, is of the opinion that by the use of salicylic acid the course of typhoid fever is shortened. Drs. Goltdammer and Ewald, however, regard this question as unsettled. All agree that the mortality this year has been certainly no less, and perhaps even greater, than in former epidemics of typhoid, while, on the other hand, they are unanimous in the observation that under



Equivalents of Weights and Mea[illegible]es,

Arranged and Compiled b[illegible]HAR[illegible]

TABLE I.

WEIGHT.			METRIC SYSTEM.	MEASURE
Grains.	Troy ℥. — gr.	Avoird. lb. — oz. — gr.	gm.] [cc.	Fluid ℥. — min.
15432.2	32 — 72.2	2 — 3 — 119.7	*a*] **1000** [*b*	33 — 415.3
15360	**32**	2 — 3 — 47.5	995.3	33 — 339.2
15037.9	31 — 157.9	2 — 2 — 162.9	974.4	**33**
14880	**31**	2 — 2 — 5	964.2	32 — 313.7
14582.2	30 — 182.2	2 — 1 — 144.7	944.2	**32**
14400	**30**	2 — 0 — 400	933.1	31 — 288.7
14126.5	29 — 206.5	2 — 0 — 126.5	915.4	**31**
14000	29 — 80	**2 — 0 — 0**	907.2	30 — 346.7
13920	**29**	1 — 15 — 357.5	902	30 — 262.4
13888.9	28 — 448.9	1 — 15 — 326.4	**900**	30 — 229.7
13670.8	28 — 230.8	1 — 15 — 108.3	885.9	**30**
13562.5	28 — 122.5	**1 — 15 — 0**	878.8	29 — 365.9
13440	**28**	1 — 14 — 315	870.9	29 — 236.9
13315.1	27 — 255.1	1 — 14 — 90.1	856.3	**29**
13125	27 — 165	**1 — 14 — 0**	850.5	28 — 385
12960	**27**	1 — 13 — 272.5	839.8	28 — 211.2
12750.4	26 — 279.4	1 — 13 — 71.9	826.8	**28**
12687.5	26 — 207.5	**1 — 13 — 0**	822.1	27 — 404.2
12480	**26**	1 — 12 — 230	808.7	27 — 185.6
12345.8	25 — 345.8	1 — 12 — 95.8	**800**	27 — 44.3
12303.7	25 — 303.7	1 — 12 — 53.7	797.3	**27**
12250	25 — 250	**1 — 12 — 0**	793.8	26 — 423.4
12000	**25**	1 — 11 — 187.5	777.6	26 — 160.
11848	24 — 328	1 — 11 — 35.5	767.7	**26**
11812.5	24 — 292.5	**1 — 11 — 0**	765.4	25 — 442.5
11520	**24**	1 — 10 — 145	746.5	25 — 134.4
11392.4	23 — 352.4	1 — 10 — 17.5	738.1	**25**
11375	23 — 335	**1 — 10 — 0**	737.1	24 — 461.7
11040	**23**	1 — 9 — 102.5	715.4	24 — 108.8
10937.5	22 — 377.5	**1 — 9 — 0**	708.74	24 — 0.9
10936.7	22 — 376.7	1 — 8 — 436.7	708.69	**24**
10802.5	22 — 242.5	1 — 8 — 302.5	**700**	23 — 338.7
10560	**22**	1 — 8 — 60	684.3	23 — 83.2
10500	21 — 420	**1 — 8 — 0**	680.4	23 — 20
10481	21 — 401	1 — 7 — 418.5	679.2	**23**
10080	**21**	1 — 7 — 17.5	653.2	22 — 57.6
10062.5	20 — 462.5	**1 — 7 — 0**	652	22 — 39.2
10025.3	20 — 425.3	1 — 6 — 400.3	649.6	**22**
9635	20 — 35	**1 — 6 — 0**	623.7	21 — 58.3
9600	**20**	1 — 5 — 412.5	622.1	21 — 32
9569.6	19 — 449.6	1 — 5 — 382.1	620.1	**21**
9259.3	19 — 139.3	1 — 5 — 71.8	**600**	20 — 153.2
9187.5	19 — 67.5	**1 — 5 — 0**	595.3	20 — 77.2
9120	**19**	1 — 4 — 370	590.9	20 — 6.4
9113.9	18 — 473.9	1 — 4 — 363.9	590.6	**20**
8750	18 — 110	**1 — 4 — 0**	566.9	19 — 96.7
8658.2	18 — 18.2	1 — 3 — 345.7	561	**19**
8640	**18**	1 — 3 — 327.5	559.9	18 — 460.8
8312.5	17 — 152.5	**1 — 3 — 0**	538.6	18 — 115.9
8202.5	17 — 42.5	1 — 2 — 327.5	531.5	**18**
8160	**17**	1 — 2 — 285	528.8	17 — 435.2
7875	16 — 195	**1 — 2 — 0**	510.3	17 — 135
7746.8	16 — 66.8	1 — 1 — 309.3	502	**17**
7716.1	16 — 36.1	1 — 1 — 278.6	**500**	16 — 447.7
7680	**16**	1 — 1 — 242.5	497.6	16 — 409.6
7437.5	15 — 237.5	**1 — 1 — 0**	481.9	16 — 154.2
7291.1	15 — 91.1	1 — 0 — 291.1	472.5	**16**
7200	**15**	1 — 0 — 200	466.5	15 — 384
7000	14 — 280	**1 — 0 — 0**	453.6	15 — 173.4

WEIGHT.			METRIC SYSTEM.	MEASURE
Grains.	Troy ℥. — grs.	Avoird. lbs. — oz. — grs.	gm.] [cc.	Fluid ℥. — min.
6835.4	14 — 115.4	0 — 15 — 272.9	442.9	**15**
6720	**14**	0 — 15 — 157.5	435.4	14 — 358.4
6562.5	13 — 322.5	**0 — 15 — 0**	425.2	14 — 192.5
6379.7	13 — 139.7	0 — 14 — 254.7	413.4	**14**
6240	**13**	0 — 14 — 115	404.3	13 — 332.8
6172.9	12 — 412.9	0 — 14 — 47.9	**400**	13 — 262.1
6125	12 — 365	**0 — 14 — 0**	396.9	13 — 211.7
5924	12 — 164	0 — 13 — 236.5	383.9	**13**
5760	**12**	0 — 13 — 72.5	373.2	12 — 307.2
5687.5	11 — 407.5	**0 — 13 — 0**	368.5	12 — 230.9
5468.3	11 — 188.3	0 — 12 — 218.3	354.3	**12**
5280	**11**	0 — 12 — 30	342.1	11 — 281.6
5250	10 — 450	**0 — 12 — 0**	340.2	11 — 250
5012.6	10 — 212.6	0 — 11 — 200.1	324.8	**11**
4812.5	10 — 12.5	**0 — 11 — 0**	311.8	10 — 269.2
4800	**10**	0 — 10 — 425	311	10 — 256
4629.7	9 — 309.7	0 — 10 — 254.7	**300**	10 — 76.6
4556.9	9 — 236.9	0 — 10 — 181.9	295.3	**10**
4375	9 — 55	**0 — 10 — 0**	283.5	9 — 309.4
4320	**9**	0 — 9 — 382.5	279.9	9 — 230.4
4101.2	8 — 261.2	0 — 9 — 163.7	265.7	**9**
3937.5	8 — 97.5	**0 — 9 — 0**	255.1	8 — 307.5
3840	**8**	0 — 8 — 340	248.8	8 — 204.8
3645.5	7 — 285.5	0 — 8 — 145.5	236.2	**8**
3500	7 — 140	**0 — 8 — 0**	226.8	7 — 336.7
3360	**7**	0 — 7 — 297.5	217.7	7 — 179.2
3189.9	6 — 309.9	0 — 7 — 127.4	206.7	**7**
3086.4	6 — 206.4	0 — 7 — 23.9	**200**	6 — 371.2
3062.5	6 — 182.5	**0 — 7 — 0**	198.4	6 — 345.8
2880	**6**	0 — 6 — 255	186.6	6 — 153.6
2734.2	5 — 334.2	0 — 6 — 109.2	177.2	**6**
2625	5 — 225	**0 — 6 — 0**	170.1	5 — 365
2400	**5**	0 — 5 — 212.5	155.5	5 — 128
2278.5	4 — 358.5	0 — 5 — 91	147.6	**5**
2187.5	4 — 267.5	**0 — 5 — 0**	141.7	4 — 384.2
1920	**4**	0 — 4 — 170	124.4	4 — 102.4
1822.8	3 — 382.8	0 — 4 — 72.8	118.1	**4**
1750	3 — 310	**0 — 4 — 0**	113.4	3 — 403.3
1543.2	3 — 103.2	0 — 3 — 230.7	**100**	3 — 185.5
1440	**3**	0 — 3 — 127.5	93.3	3 — 76.8
1388.9	2 — 428.9	0 — 3 — 76.4	**90**	3 — 22.9
1367.1	2 — 407.1	0 — 3 — 54.6	88.6	**3**
1312.5	2 — 352.5	**0 — 3 — 0**	85	2 — 422.5
1234.6	2 — 274.6	0 — 2 — 359.6	**80**	2 — 340.4
1080.2	2 — 120.2	0 — 2 — 205.2	**70**	2 — 177.8
960	**2**	0 — 2 — 85	62.2	2 — 51.2
925.9	1 — 445.9	0 — 2 — 50.9	**60**	2 — 15.5
911.4	1 — 431.4	0 — 2 — 36.4	59.05	**2**
875	1 — 395	**0 — 2 — 0**	56.7	1 — 441.7
771.6	1 — 291.6	0 — 1 — 334.1	**50**	1 — 332.7
617.3	1 — 137.3	0 — 1 — 179.8	**40**	1 — 170.2
480	**1**	0 — 1 — 42.5	31.1	1 — 25.6
462.9		0 — 1 — 25.4	**30**	1 — 7.6
455.7*h*		0 — 1 — 18.2	29.5*c*	**1**
437.5		**0 — 1 — 0**	28.3	0 — 462.9
308.6			**20**	0 — 325
154.3			**10**	0 — 162.5
15.43			**1**	0 — 16.24
1			0.064799	0 — 1.05*d*
0.949*i*			0.061519	**0 — 1**

a Kilogramme. *b* Litre. *c* 29.5288. *d* 16.2553. *e* 1.05334. 064799.

NOTE.

The column "Metric System," is applicable both to weight (in grammes), and to measure (in cubic centimetres); the equivalents for *weight* are found on the *left*, in grains, and in troy and avoirdupois weight; and the equivalents in *measure* are found on the *right*, in fluid ounces and minims.

The exact equivalence of weight and measure holds good only in the case of pure water at 4.5° C (40° F.), and practically also at 15.5° C (60° F.).——[1 cc. of water at 4.5° C = 1 gm.; at 15,5° C = 0,99912 gm.]

The value of the gramme in grains has been taken as 15.4322, as determined by late investigations.

We append some useful formulæ for converting *weight* into *measure*, and *vice versa*, as well as to find the specific gravity if weight and measure are given.

1. TO CONVERT MEASURE[illegible] WEIGHT (W.)

$$\frac{\text{M. in min.} \times \text{Sp. Gr.}}{1.0533} =$$

M. in min. × Sp. Gr. × 0.95 =

$$\frac{\text{M. in fl. oz.} \times \text{Sp. Gr.}}{0,002194} =$$

M. in fl. oz. × Sp. Gr. × 455.7 =

$$\frac{\text{M. in fl. oz.} \times \text{Sp. Gr.}}{1.0533} =$$

$$\frac{\text{M. in fl. oz.} \times \text{Sp. Gr.}^{*}}{0.96} =$$

M. in cc. × Sp. Gr. =

* Sp. Gr. in these 3 formulæ refers to water = 1;

(Entered according to Act of Congress in the Of[illegible] the

eas, Common and Decimal.

d CHARLES RICE.

TABLE II. (*Continuation of Table I.*)

WEIGHT.	METRIC SYSTEM.	MEASURE	WEIGHT.	METRIC SYSTEM.	MEASURE
Grains.	gm.] [cc.	Minims.	Grains.	gm.] [cc.	Minims.
480 1ʒ	31.103	505.60	75.9	4.921	**80**
478.398	**31**	503.9	61.729	**4**	65
462.966	**30**	487.6	**60** 1ʒ	3.888	63.2
455.7*h*	29.5*c*	**480**	56.962	3.691	**60**
450 7½ʒ	29.159	474	**54.7** ½oz	3.544	57.6
447.534	**29**	471.4	47.5	3.076	**50**
437.5 1oz	28.349	460.8	46.296	**3**	48.8
432.102	**28**	455.1	42.7	2.768	**45**
427.2	27.683	**450**	**40** 2ɔ	2.592	42.1
420 7ʒ	27.216	442.4	37.974	2.461	**40**
416.669	**27**	438.9	33.2	2.153	**35**
401.237	**26**	422.6	30.864	**2**	32.5
398.7	25.835	**420**	**30** ½ʒ	1.944	31.6
390 6½ʒ	25.272	410.8	28.5	1.845	**30**
385.805	**25**	406.4	23.7	1.538	**25**
370.373	**24**	390.1	**20** 1ɔ	1.296	21.06
370.2	23.992	**390**	18.99	1.230	**20**
360 6ʒ	23.328	379.2	15.4322	**1**	16.3
354.941	**23**	373.9	**15**	0.972	15.8
341.8	22.147	**360**	14.240	0.923	**15**
339.508	**22**	357.6	**14**	0.907	14.7
330 5½ʒ	21.384	347.6	13.889	0.900	14.6
324.076	**21**	341.4	**13**	0.842	13.6
313.3	20.301	**330**	12.346	0.800	**13**
308.644	**20**	325.1	**12**	0.777	12.6
300 5ʒ	19.439	316	**11**	0.713	11.6
293.212	**19**	308.8	10.802	0.700	11.4
284.8	18.455	**300**	**10**	0.648	10.5
277.779	**18**	292.6	9.493	0.615	**10**
270 4½ʒ	17.496	284.4	9.259	0.600	9.8
262.347	**17**	276.3	**9**	0.583	9.5
256.3	16.609	**270**	8.544	0.554	**9**
246.915	**16**	260.1	**8**	0.518	8.4
240 ½ʒ 3	15.552	252.8	7.716	0.500	8.1
231.483	**15**	243.8	7.595	0.492	**8**
227.8	14.764	**240**	**7**	0.453	7.4
218.75 ½oz	14.175	230.4	6.645	0.431	**7**
216.051	**14**	227.6	6.173	0.400	6.5
210 3½ʒ	13.608	221.2	**6**	0.389	6.3
200.619	**13**	211.3	5.696	0.369	**6**
199.4	12.919	**210**	**5**	0.324	5.3
185.186	**12**	195.1	4.747	0.308	**5**
180 3ʒ	11.664	189.6	4.629	0.300	4.9
170.9	11.073	**180**	**4**	0.259	4.2
169.754	**11**	178.8	3.797	0.246	**4**
154.322	**10**	162.5	3.086	0.200	3.2
150 2½ʒ	9.719	158	**3**	0.194	3.1
142.4	9.228	**150**	2.848	0.184	**3**
138.889	**9**	146.3	**2**	0.129	2.1
123.458	**8**	130	1.898	0.123	**2**
120 2ʒ	7.776	126.4	1.543	0.100	1.6
113.9	7.382	**120**	1.389	0.090	1.46
109.37 ¼oz	7.087	115.2	1.234	0.080	1.3
108.025	**7**	113.8	1.080	0.070	1.14
100 5ɔ	6.479	105.3	**1**	0.065*f*	1.05*e*
94.9	6.152	**100**	0.949*i*	0.061	**1**
92.593	**6**	97.5	0.926	0.060	0.97
80 4ɔ	5.184	84.3			
77.161	**5**	81.3			

TABLE III.

SMALL WEIGHTS.	
Grammes.	Grains.
0.0647*f*	**1**
0.0567	**7/8**
0.050	0.772
0.0486	**3/4**
0.0432	**2/3**
0.040	0.617
0.0324	**1/2**
0.030	0.463
0.0216	**1/3**
0.020	0.309
0.0162	**1/4**
0.0129	**1/5**
0.0108	**1/6**
0.010	0.154
0.009	0.139
0.0081	**1/8**
0.008	0.123
0.007	0.108
0.0065	**1/10**
0.006	0.092
0.0054	**1/12**
0.005	0.077
0.0043	**1/15**
0.004	**1/16**
0.0032	**1/20**
0.003	0.046
0.0026	**1/25**
0.0022	**1/30**
0.002	0.031
0.0018	**1/36**
0.0016	**1/40**
0.00135	**1/48**
0.00129	**1/50**
0.0011	**1/60**
0.001	**1/64**

334. 964799. *g* 0.06151. *h* 455.6944. *i* 0.94936.

2. TO CONVERT WEIGHT (W.) INTO MEASURE (M.)

$$\frac{\text{W. in grs.} \times 1.0533}{\text{Sp. Gr.}} = \text{M. in min.}$$

$$\frac{\text{W. in grs.}}{\text{Sp. Gr.} \times 0.95} = \text{M. in min.}$$

$$\frac{\text{W. in grs.} \times 0.002194}{\text{Sp. Gr.}} = \text{M. in fl. oz.}$$

$$\frac{\text{W. in grs.}}{\text{Sp. Gr.} \times 455.7} = \text{M. in fl. oz.}$$

$$\frac{\text{W. in troy oz.} \times 1.0533}{\text{Sp. Gr.}} = \text{M. in fl. oz.}$$

$$\frac{\text{W. in av. oz.} \times 0.96}{\text{Sp. Gr.}} = \text{M. in fl. oz.}$$

$$\frac{\text{W. in gm.*}}{\text{Sp. Gr.}} = \text{M. in cc.}$$

3. TO FIND THE SPECIFIC GRAVITY (SP. GR.) FROM THE WEIGHT (W.) AND MEASURE (M.)

$$\frac{\text{W. in grs.} \times 1.0533}{\text{M. in min.}} = \text{Sp. Gr.}$$

$$\frac{\text{W. in grs.}}{\text{M. in min.} \times 0.95} = \text{Sp. Gr.}$$

$$\frac{\text{W. in grs.} \times 0.002194}{\text{M. in fl. oz.}} = \text{Sp. Gr.}$$

$$\frac{\text{W. in grs.}}{\text{M. in fl. oz.} \times 455.7} = \text{Sp. Gr.}$$

$$\frac{\text{W. in troy oz.} \times 1.0533}{\text{M. in fl. oz.}} = \text{Sp. Gr.}$$

$$\frac{\text{W. in av. oz.} \times 0.96}{\text{M. in fl. oz.}} = \text{Sp. Gr.}$$

$$\frac{\text{W. in gm.}}{\text{M. in cc}} = \text{Sp. Gr.*}$$

r=1; ers to water = 1000.

the Librarian of Congress).

the daily treatment with salicylic acid cases which entered the hospital during the first or second week of the disease, with the temperature of 40° to 41° C., became free from fever after the second or third day, although the local processes (tumor of the spleen, roseola, diarrhœa, etc.,) continued. It is far easier to arrive at a definite conclusion regarding the influence of the acid in acute rheumatism than in typhoid. Indeed, one may say with certainty that in *many cases*, after three or four doses, or even after five or ten grammes, not only is the fever reduced, but the articular pains also are dispersed, so that in a few days acute cases may be looked upon as cured. Whether, however, the tendency to relapses and inflammation of serous membranes is lessened is doubtful; indeed, in Dr. Ewald's experience, it is negatived.

The same journal contains an abstract of a paper by Staff-Surgeon Stricker in the *Berliner Klinische Wochenschrift*, on the use of this remedy in acute rheumatism. Fourteen cases, in which the local symptoms were strongly marked, were treated in Prof. Traube's wards with salicylic acid, which had been purified by repeated crystallization. This pure acid can be given internally in considerable doses without any of those unpleasant results which have followed the use of the commercial acid, and only excites some dryness of the mouth and pharynx followed by increased secretion. This inconvenience can, however, be obviated, by giving the acid in half-gramme or gramme doses every hour in the form of powder, and enclosed in capsules. In the treatment of rheumatic fever the administration is to be continued until the affected joints can be moved without pain. Dr. Stricker says, that all the patients thus troubled were not only relieved of their fever, but also of the local symptoms within forty-eight hours; most of them even within a much shorter period. The largest quantity of the acid found necessary to produce this effect, was fifteen grammes (230 grains), and the smallest, five grammes; but that larger quantities can be taken without injury to the digestive apparatus, is proved by the fact that one patient actually took twenty-two grammes in the course of twelve hours, through an excess of zeal on his own part; but, nevertheless, his tongue became clean, and his appetite returned in the course of this vigorous drugging. Dr. Stricker observed, that the more acute the case, the better the action of the acid. He finds it best to begin the treatment in the morning, for then its effects are generally so decided by evening, that it is unnecessary to disturb the patient's rest to give him medicine. The general phenomena, which were observed to follow large doses of the acid, were copious perspiration, ringing in the ears, and slight deafness; and in two cases patients became more than usually lively.

Employment of Carlsbad Waters in Diabetes.

Prof. Seegen, in a monograph on the waters of Carlsbad, states that improvement takes place in the general health of all diabetic patients while using these waters. In the greater number of cases, the excretion of sugar diminishes. It is only in very severe cases that no effect of this kind is observed. Not unfrequently, tolerance of the use of carbohydrates is observed.—*Wien. Med. Woch.*, and *The Practitioner*.

New Method of Local Depletion.

Dr. Theobald (*Amer. Jour. of Med. Sci.*) noticing the inconvenience of artificial leeches, suggests that blood may easily be obtained in moderate quantity from a slight and superficial nick or ablation of a thin disc of skin which has been pinched up with a pair of forceps. He claims that by this method more blood is obtained than by the simple circular artificial leech; that no scar need be left: that it is not so painful, and that it is very simple. With the view of ascertaining what influence some of the substances which are known to prevent or retard the coagulation of blood, would have in promoting hemorrhage from a wound such as he has suggested, he made a number of nicks, as nearly alike as possible, with a sharp razor into the skin of his fingers and applied to the different wounds a drop of one of the following solutions, each being of the strength of ʒ ii, to Aquæ ℥ i: ammon. carb., ammon. muriat., liq. ammon fort., sodæ bicarb., potas. carb. Besides these he applied on one a weak solution of liq. potassæ in water, to another soap, and to two others he made no application, reserving them for comparison. The influence of the ammonia solutions, more especially of the ammon. carb. and of liq. ammon., in retarding coagulation and preventing the flow of blood, was unmistakable; the others seemed to exert but little influence. Some smarting of only momentary duration however, followed the applications, and the wounds to which the solutions were applied healed as readily as the others.—*Amer. Jour. of Med. Sci.*

Treatment of Pruritus Vulvæ.

At the meeting of the Harveian Society of London, on the 2nd of March, Dr. Wiltshire read a paper on Pruritus Vulvæ in which, following the naration of the causes which may lead or contribute to this distressing affection, the following therapeutic measures were recommended. Being a symptom of different maladies the course to be pursued in each case will necessarily differ. "Of local applications, borax was the best; and next potent, parasiticides. Ointments disagreed, and were too heating. Glycerine did not always agree. Tar or creosote were often useful. In catamenial itching borax did good. Irritating applications were to be avoided. In diabetic pruritus, solutions of borax and careful drying of the parts were to be adopted. In the pruritus of gout, soap was inferior to oatmeal and water. Bromide of potassium internally and externally did good. Arsenic suited some cases admirably. Bran baths

were often useful. A curd formed by adding *liquor plumbi* to milk, was often very agreeable.

Effects of Colors on Lunatics.

Dr. PONZA, an Italian physician, and the renowned Jesuit astronomer Father Secchi, have recently propounded some peculiar theories on the effects of colors on lunatics, and it is by them seriously asserted that scarlet has an exciting effect, crimson a soothing and comforting effect on those who are depressed, and blue a calmative effect on the maniacal. Such is the pith of the argument. The moral appears to be, that the insane should be surrounded with everything that is agreeable, cheerful, and non-irritating. Aubrey, who wrote two centuries ago, has very pithily expressed the same idea in the following extract.

"The curious oriental reds, blews, and greens in glasse-painting, especially when the sun shines, doe much refresh the spirits. After this manner did Mr. R. revive the spirits of a poor distracted gentleman, for whereas his former physitian shutt up his windows, and kept him in utter darkness, he did open his window lids and let in the light, and filled his windows with glasses of curious tinctures, which the distempered person would always be looking on, and it did conduce to the quieting of his disturbed spirits."—*Aubrey, in his Anecdotes and Traditions; Camden Society Edition.* p. 96.

Carbolic Acid in Treatment of Whooping Cough.

SAMUEL LEE writes to the *Br. Med. Jour.* Mar. 18 p. 348, that he has used carbolic acid inhalations in both mild and severe forms of whooping cough, and in both with considerable relief. In three cases that have come under his notice in adults, in one of which the malady had continued in spite of all treatment for eight months, attended with hæmoptysis and severe and frequent attacks of coughing, the relief obtained from inhalations of the acid was very marked.

Domingos Carlos has also employed carbolic acid as a last resort in the case of a child, three years of age, which had suffered of whooping-cough for two weeks, and upon which all other known remedies had been exhausted. The complaint yielded in two days completely. Other cases since treated in like manner gave equally favorable results. His method of administration is: Acid. Carbol. cryst. 0.25 gm. (4 grs.), Aquæ Aurant. flor. 5.0 gm. (4ʒ), Syrup. Acac. 50.0 gm. (14½ʒ), S. 4 to 6 teaspoonfuls daily.

Poisoning by Œnanthe Crocata.

AT Stockton-on-Tees, two children have died, and five others have been rendered seriously ill, from eating the root of this common unbelliferous plant; and the man, John Kindler, who gave the root to the children, having dug it up from the river bank, has been apprehended on a charge of having caused the deaths. This virulently poisonous plant has probably caused more deaths than any other of our native plants; and as it is very frequent by river sides, it ought to be well known and avoided by everyone. Yet it is more than probable that not a few medical practitioners in the country would be unable to enlighten their neighbours on the distinctions between this and other similar but harmless umbelliferæ, such as wild celery (*Apium graveolens*) and parsely (*Petroselinum sativum*). Though the foliage and inflorescence of these species resemble those of *œnanthe crocata*, neither of them possesses the large spindle-shaped, swollen tubercular roots of the latter, which are the portion usually eaten. It appears that, at the time referred to, they were thought to be small parsnips, to which, however, the foliage and flowers bear but the faintest resemblance. Children, however, will eat anything that looks eatable; and we think good will be done if John Kindler's thoughtless conduct in giving them a root casually picked by the river, be properly censured. Death is frequently very rapid, and tetanus usually present, as in the fatal cases above referred to.—*British Medical Journal.*

BIBLIOGRAPHY.

LECTURES ON SYPHILIS; And on some Forms of Local Diseases, Affecting Principally the Organs of Generation. By HENRY LEE, Professor of Surgery at the Royal College of Surgeons of England, etc. Philadelphia: Henry C. Lea. 1875. 8vo, pp. 246.

THE contents of this handy volume have appeared, in part, already in different periodicals, and are intended to illustrate some of Hunter's doctrines, a number of which require to be modified, while others, long neglected, still serve as landmarks for this and succeeding generations. The author says that the chief subjects treated of in these lectures, which are not dwelt upon in the systematic works of other English authors of the present day, are the inoculability of syphilitic blood in its various forms; the conditions under which the secretions of primary and secondary syphilitic manifestations may be inoculated naturally or artificially; the morbid processes produced by such inoculations; the modifications of those processes in patients previously syphilitic; primary and secondary syphilitic diseases of the mucous membranes, and their liability to communicate constitutional syphilis; the essential difference in the morbid processes in which the constitutional and local forms of syphilis respectively have their origin; and the pathology and treatment of discharges from the prostate gland, Cowper's glands, and the vesiculæ seminales.

Like most authorities of this day, the author believes that the local suppurating sore is not syphilis, and the arguments and cases cited are quite as conclusive as any that have been presented, but in republishing his lectures in the form of a treatise more care should have been taken to eliminate references to models and plates which have not been reproduced in the book. The paper and press-work are in the publisher's best style.

OUTLINE DRAWINGS OF THE FIGURE: For Recording the Situation and Form of Cases of Skin Disease, and for Noting their Progressive Changes under Treatment. Arranged by BALMANNO SQUIRE, M.B., London, Surgeon to the British Hospital for Diseases of the Skin. London: J. & A. Churchill. 1876.

WE have received from the author a copy of these very useful lithographic plates, which include four full-length figures and twelve smaller plates of the head and extremities.

Considerable use has been made already of outline figures for recording the seat of injuries or diseases of the viscera and extremities, and it is remarkable that no set of drawings for the use of the dermatologist has heretofore been furnished. The ones prepared by Dr. Squire are all that could be desired, and deserve to become very popular among those who like to have careful records of cases and wish at the same time to economise in the labor of writing.

ANNUAL PRICE-CURRENT OF DRUGS, Chemicals, Medicines, Paints, Oils, Chemical Products, Glass, Glassware, Proprietary Medicines, Toilet Articles, Perfumery, etc. VAN SCHAACK, STEVENSON AND REID. Vol. vi. Chicago: 1876, 12mo, pp. 390.

THIS is one of the most elegant publications of the sort that has come to our hands, and speaks well for the enterprise of this already well-known firm. Relying upon low prices and superior goods, this house employs no travelling agents and carries on its business solely by correspondence. To do this successfully, a published price-current is essential, and it is evident that no expense has been spared to make this volume complete and attractive in every respect.

A TREATISE ON SURGERY: Its Principles and Practice. By T. HOLMES, M.A. Cantab., Surgeon to St. George's Hospital, with 411 illustrations, chiefly by Dr. Westmancott. Philadelphia: Henry C. Lea. 1876. 8vo, pp. 960.

FOR many years the author has been known by his various contributions to medical periodicals, and his editorship of the elaborate system of surgery in five volumes, as one of the most able living authorities and writers on surgical topics; and, although it can hardly be claimed that the profession either in England or here are in need of standard surgical treatises at present, Mr. Holmes' experience should enable him to write a work which, while it may embrace all that is established in the art and science of this branch, should be no simple compilation of the writings of others. This has been accomplished very well in this book, and the student will find it very complete, so far as relates to the number of subjects embraced.

About all the subjects proper to a treatise of this sort have been included, although to accomplish it the space devoted to each one is necessarily limited. Although Mr. Holmes thinks "that a knowledge of the main principles of diagnosis and treatment ought to be possessed by every surgeon in the case of diseases of the organs of special senses quite as much as those of the rest of the body," and refers to the "curse of specialism," and the injuries it has inflicted equally on the profession and the public, he has asked two specialists to assist him in the sections devoted to the diseases of the eye and the ear. Surely the coöperation of "specialists" in the making of his larger "System of Surgery," in five volumes, has been no curse to him, and has given us the best work on surgery which we possess, and warrants us in thinking that if specialism is a curse, it has mitigating features.

Nearly all the illustrations are new, and have been made from the abundant materials at the author's command. In some of its practical features the book is very good, such as in the sections on operative surgery, bandaging, anæsthesia, the use of trusses, treatment of ulcers and scars, etc.; and we can cordially recommend it as a text-book for the student, although it is hardly so complete that the practitioner will find in it what he will require. The Index of Authors is an excellent feature, and will enable the reader to refer to more extended writings. The reputation of the publisher is a sufficient guarantee that his portion of the work has been well done.

NEW BOOKS.

Brandis (Dr.). Forest Flora of North-western and Central India. Text 8vo, plates 4to.

Dittmar (William). A Manual of Qualitative Chemical Analysis. Post 8vo, pp. 384.

Frankland (Edward). Lecture Notes for Chemical Students. Vol. I. Inorganic Chemistry. New ed. Post 8vo, pp. 220.

Kirby (E. A.). On the Administration and Value of Phosphorus as a Remedy for Loss of Nerve Power, Neuralgia, Hysteria, Melancholia, and certain Atonic Conditions of the Cerebro-Spinal System; with Formulæ and General Directions for Regimen and Diet. 3d ed., 12mo, pp. 68, sewed.

Willis (O. R., Ph.D.). Flora of New Jersey. 8vo, pp. 71.

Hooker's Chemistry. By Worthington Hooker. Revised and corrected by H. Carrington Bolton, School of Mines, Columbia College. pp. 430.

Naquet's Legal Chemistry. A Guide to the Detection of Poisons, Examination of Stains, etc., etc., as applied to Chemical Jurisprudence. Translated, with additions, from the French of A. Naquet, Prof. to the Faculty of Medicine of Paris. By J. P. Battershall, Nat. Sc.D. With a preface by C. F. Chandler, Ph.D., M.D., LL.D.

Macdonald. Guide to the Microscopical Examination of Drinking Water.

Wilson (Prof. George, Univ. of Edinburgh). Inorganic Chemistry. Rev. and enl. by Stevenson Macadam. Ph.D. First Am. ed. By Prof. G. W. Plympton, Brooklyn Polytechnic Inst. 12mo.

Muspratt. Encyclopædia of Chemistry, Theoretical, Practical, and Analytical, as applied to the Arts and Manufactures. To be completed in 40 parts. A reconstruction, with revisions and additions, of Dr. Muspratt's celebrated "Chemistry as applied to the Arts," and embracing the latest scientific knowledge and the most recent practical inventions and appliances in Chemistry.

Dragendorff (Dr. G.). Analyse Chimique de quelques Drogues actives, etc. This is a translation of the valuable researches of the celebrated Professor of Dorpat, by Dr. Morel, of Ghent. These researches were directed to the processes for determining the quality and quantity of the active principles of the leading narcotic and other powerful drugs, etc., such as aconite, belladonna, stramonium, henbane, opium, tobacco, colchicum, nux vomica and St. Ignatius beans, celandine, hemlock, ipecacuanha, aloes, and cantharides. A vast number of original analyses are given. There is also a chapter devoted to the alkaloids of guarana, tea, and coffee, which are especially interesting.

Hager (H.). Manuale Pharmaceuticum. Vol. II. (Various Chemical and Pharmaceutical Tables, and the composition of various Mineral Waters; also directions for making them). 8vo, Leipzig, 504 pp.

Fresenius (Dr. C. Remigius). Qualitative Analysis. Ninth ed. Translated from the fourteenth German Ed. By A. Vacher. 8vo, pp. 400.

Valentine (Wm. Geo., F.C.S., etc.). Introduction to Organic Chemistry. With 82 engravings on wood. 3d Ed. 8vo, pp. 183.

Hassall (Arthur Hill, M.D., Lond.). Food: Its Adulterations, and the Methods for their Detection. Illust. by 200 wood engr. 12mo, pp. 896.

Goold (Jos.). Receipts and Instructions for the Preparation of Artificial Aërated Waters. 8vo.

Classen (A.). Précis de Chimie Analytique. 1 part. Analyse qualitative inorganique et organique. 8vo, pp. 192.

Hemptinne (A. de). Nouveau procédé de fabrication de l'acide sulfurique. 8vo, pp. 7.

Pfeiffer (O.). Chemische Untersuchungen über das Reifen des Kernobstes. 8vo.

Van Melckenbecke (E.). Nouveau procédé pour découvrir la présence de bromure de potassium dans l'iodure de la même base. 8vo, pp. 6.

Weber (J. C.). Die Mineralien, in 64 colorirten Abbildungen nach der Natur. 2te Aufl. 8vo, pp. 90.

Rössig (G.). Convolvulaceæ in medicinisch-pharmaceutischer Beziehung. 8vo, pp. 83.

Groth (P.) Physikalische Krystallographie und Einleitung in die Krystallographische Kenntniss der wichtigeren Substanzen. Illustrated. 8vo.

The forthcoming work is announced: SEILER.—Micro-Photographs in Histology, Normal and Pathological. By Carl Seiler, M.D., in conjunction with J. Gibbons Hunt, M.D., and Joseph G. Richardson, M.D.
To be issued in monthly numbers, each containing at least four plates with letter-press. Size of page, 9x11 in. $0.60 per number or $6.00 per annum.

BOOKS AND PAMPHLETS RECEIVED.

Deneffe (V. and A Van Wetter). De l'anæsthésie Produite par Injection Intra-Veineuse de Chloral Selon la Méthode de M. le Prof. Oré. Brussels: Henri Manceaux, 1875. 8vo, paper, pp. 225.

Ziemssen (Dr. H. Von). Cyclopædia of the Practice of Medicine. Vol. IV. Diseases of the Respiratory Organs. William Wood & Co.

Bouchardat (A.) Annuaire de Thérapeutique, de Matière Médicale de Pharmacie et de Toxicologie. Paris: Germer Baillière et Cie. 1876. 12mo, pp. 296.

Proceedings of the New Hampshire Pharmaceutical Association, at their 2d Annual Meeting, held in the City of Manchester, Sept. 12, 1875. 8vo, Concord: 1876.

Robbins (Dr. Chas. A.). Über die wesentlichen Bestandtheile von Gelsemium sempervirens. Berlin: 1876. 8vo, pp. 32.

Maisonneuve (P.) Étude sur la structure et les produits du Camphrier de Bornéo. Paris: 1875. 8vo, pp. 65.

Guibourt (J. B.) Histoire naturelle des drogues simples. 7 édit. With 1024 illustr. Edited by G. Planchon. Paris: 1876. 4 vols. 8vo.

Duchartre (P.) Élements de Botanique. Paris: 1876. 8vo, pp. 1088.

Vaccination in St. Petersburg.—In the Foundling Hospital, St. Petersburg, where most of the public vaccination is carried on, calf lymph has been used side by side with human lymph for the last five or six years. It is said to be equally protective, and failures in primary operations have, by care and perseverance, been reduced as low as two per cent.

CORRESPONDENCE.

Preservation of Tincture of Kino.

TINCTURE of kino gelatinizes after standing, and becomes entirely useless. Different remedies have been suggested for the prevention thereof. One author affirms that the use of carbonate of magnesia in the preparing of the tincture will obviate it; another asserts that the menstruum as given by U. S. Pharmacopœia will yield a satisfactory product (Proceedings of Pharm. Assoc., 1874), but none of the two will do.

As the gelatinized tincture of kino can be heated with liq. potassa without change, I tried acids, and found an addition of acetic acid the best. 2 fl. ʒ acetic acid to the pint will not only prevent the gelatinization effectually, but also liquify the gelatinized tincture rapidly, especially by warming in water-bath and shaking.

The same may be resorted to with other liquids which are apt to gelatinize, such as fl. extract of Pinus Canadensis and fl. extract of cotton-root bark.

AD. TSCHEPPE, D.P.

NEW YORK, April 6, 1876.

The Apothecaries' and Druggists' Mutual Life Association.

To the Editor of NEW REMEDIES.

DEAR SIR:—I beg to call your attention to several points regarding the constitution of the Apothecaries' and Druggists' Mutual Life Association as commented upon by you in your editorial in last number of your journal (page 65).

The idea is to administer the affairs of the association as simple as possible, and the Brokers' Life Association, the most successful of all life associations in the United States, has given the basis to the one I represent.

The person wishing to become a subscriber must, in his application (page 88 of your journal), declare that he is in ordinary good health. His not being so debars him from becoming one. In regard to the age of the applicant, the committee who formed the rules of the association thought best not to make any difference in the rate of their contributions, as this organization wishes to combine the charitable with the profitable. Many of our colleagues who have toiled hard have found, when growing older, that their incomes have decreased, and many never had any opportunity to put anything aside for the beloved ones he leaves behind. Instances of this kind have occurred lately, as we all know, and principally to provide for their non-occurrence this association has been formed.

Another point mentioned by you in regard to subscribers receiving the names of their co-subscribers and report of director is provided for in Rule V. viz.: The director must send each and every subscriber, in February, by mail, a correct list of the names of all the contributors.... Shall answer all communications, keep an accurate account, giving and taking receipts for all moneys received and paid out, and shall send or give annually a detailed report to all and every subscriber..... I am in perfect accord with your objection that all the business of such an organization should not be left to any one person; but on referring to our rules you will find that on director is chosen annually in addition to those already in office.

The second, third, etc., director constituting the committee to audit all acts of the first director, etc., and in case of the first director's absence, from any cause whatever, the director next in rank takes his place, so that there is a constant succession, and the association is never without a head.

Since my last, the number of subscribers has increased greatly, for which I have principally to thank your kindness in furthering the object of our organization and allowing space in your valuable journal for me to communicate with my colleagues.

I remain, esteemed sir,

Yours, respectfully,

H. A. CASSEBEER, JR.

57 Fourth avenue, New York, March 30, 1876.

PHARMACEUTICAL SUNDRIES AND NEW INSTRUMENTS.

An Improved Section-Cutter.

SIR: Messrs. Tiemann & Co. made for me, some months ago, a microscopic section-cutter that may interest your readers. It is a modification of the well-known apparatus of Dr. Edward Curtis. The brass and glass plates of Dr. Curtis's holder are replaced by a single slab of vulcanite. By means of the screw a tight-fitting shaft of vulcanite is moved upwards through the cylindrical barrel. The screw is cut fifty threads to the inch, and the circumference of the milled head graduated for measuring the thickness of sections.

The holder may be secured to a table by means of the clamp. The tissue to be cut, previously hardened, is embedded, in the usual manner, in a paraffine cylinder, cast upon the end of the vulcanite shaft. The paraffine is held firmly to the shaft by two dovetailed slots cut at right angles to each other in the end of the shaft. The knife may be used with or without the knife-frame of Dr. C. With the frame large sections of extreme thinness may be cut with facility. While the size of the instrument is the same as that of its original, the cost is reduced more than one-half.

CHARLES JEWETT.

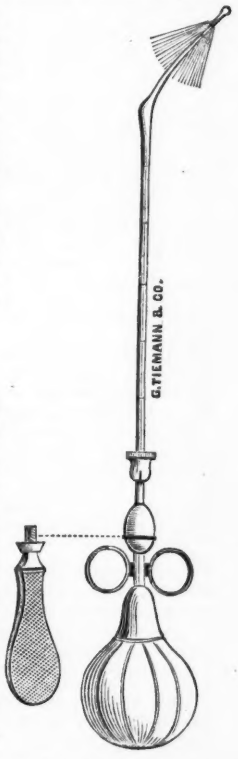
310 Gates ave., Brooklyn, N. Y.

Lœflund's Concentrated Extract of Malt, and Lœflund's Concentrated Liebig's Food for Infants.—The extract of malt has for some time been officinal in the German Pharmacopœia; being used both as a tonic for invalids and convalescents and as a medium for administering medicines. It is said also to be of service in coughs and throat affections, facilitating expectoration and soothing irritation of the mucous membrane. Ed. Lœflund, of Stuttgart, makes a very elegant concentrated preparation of this extract, which is rich in the glucose produced by germination of the malt, and the action of the resulting diastase on the starch of the grain; is free from sediment and alcohol or carbonic acid; is agreeable to taste, and uniform in the quantity of its ingredients.

Liebig's Food for Infants has long been known as among the best substitutes for mother's milk, but the trouble of making it fresh each time that it is required has greatly interfered with its use, and quite as often has led to carelessness in the mixing and the repeated heatings and stirrings, which are necessary for converting the otherwise poorly digestible starch of the wheat flour into glucose. Mr. Lœflund offers a concentrated preparation of this food which purports to be in every way equal to that prepared by the original formula, and which has only to be mixed with warm cow's milk in the proportion of one tablespoonful of the extract to one-third of a pint of the milk when it is ready for use. Albert Dung, Jr., Druggist and Chemist, at 61 Bowery, New York, is the sole agent for both of these in the United States.

Salt's New Combined Sound and Syringe for Uterine Purposes.

MESSRS. GEO. TIEMANN & CO., of 67 Chatham street, are making an instrument to serve the double purpose of diagnosis and treatment. A hollow Simpson's uterine sound is constructed so as to admit of its handle being detached while it is in situ, after which an india-rubber bulb, containing a medicated fluid, can be screwed on, and its contents, by pressure, be made to emerge through minute openings in the extremity of the sound. These openings are oblique and give the out-flowing fluid the reverse direction shown in the cut, thus effectually douching the cavity of the uterus.



Soluble Pills.

From W. H. Schieffelin & Co., we have received samples of pills covered with a soluble coating, which serves not only to protect their contents from the action of air and moisture, but also enables them to be swallowed without being tasted. There has been so much objection to the coating of pills—owing to the insoluble nature of the material sometimes used—that coated pills of all kinds are being looked upon by physicians with some disfavor. Another argument against them is the uncertainty of the character of their contents.

These pills of Messrs. Schieffelin & Co. are guaranteed to be of good quality, and are mostly made according to pharmacopœial formulæ. Each one shows the mark of the pin upon which the pill was dried, after having been dipped in its coating, and the latter has the appearance of a glaze or thin varnish, giving the pill rather an attractive appearance—to one who expects to sell, not to take them. Ten seconds after taking a two-grain bi-sulphate of quinia pill into the mouth, the bitter taste became apparent; and, at the end of half a minute, judging by the taste, there was not a trace of coating left on it. We have confined our personal experience to the quinine; and have not ventured, as yet, on testing the compound cathartics which accompanied them, and which we believe should come first in practice.

Clinical Registering Thermometers.

THERE is hardly an instrument in use by the profession which has within as short a time become so essential to careful and intelligent practice as the clinical thermometer, or which, to be of value, needs to be made with such accuracy. The American edition of Aitken's *Science and Practice of Medicine*, published in 1866, was the first of our text-books giving diagrams of typical ranges of temperature in disease, and the recommendation then made (page 62) of the thermometers of Mr. L. Casella, of 23 Hatton Gardens, London, has been well sustained by the future work of this maker, and no better guarantee of accuracy is now needed than his name etched into the tube of one of these instruments. Messrs. E. Fougera & Co., of 30 North William street, New York, the sole agents in the United States for Mr. Casella's thermometers, have sent us one in which there is a patented device for preventing the index from uniting with the mercury in the bulb. This is shown in the adjoining cut. C is the index which, when shaken down, is caught in the enlargement at A. Between the enlargement and the bulb the calibre of the tube is very small, and this, too, aids in preventing the further descent of the index.

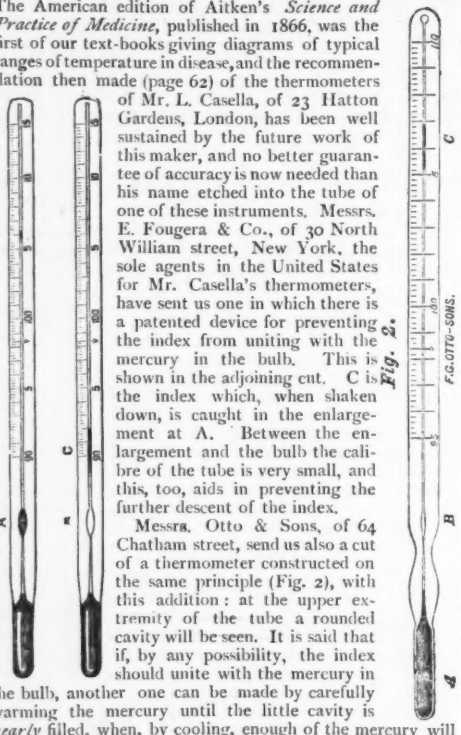


Fig. 2.

Messrs. Otto & Sons, of 64 Chatham street, send us also a cut of a thermometer constructed on the same principle (Fig. 2), with this addition: at the upper extremity of the tube a rounded cavity will be seen. It is said that if, by any possibility, the index should unite with the mercury in the bulb, another one can be made by carefully warming the mercury until the little cavity is *nearly* filled, when, by cooling, enough of the mercury will remain to form an index when it is shaken down into the lumen of the tube. The Messrs. Otto also warrant the accuracy of their instrument.

Giffey, Schiele & Co's. Lacteous Farina.—We have received from Henry Clotz, 81 Maiden Lane, the importer of this preparation, a tin box containing a quantity of this substitute for mother's milk, and food for infants and children. The published analyses and recommendations which accompany it, pronounce it to be equal to other and similar preparations. It certainly has a delicate odor and agreeable appearance, and we propose to give it a fair trial on a baby or two when warm weather comes.

De Jongh's Light-brown Cod-liver Oil.

THIS is by no means a new preparation, but the agents in this country (John F. Henry, Curran & Co.) fortified by abundant recommendations from European physicians, are endeavoring to give it a larger sale in this market. There is no question that this variety of oil has sustained its reputation completely for purity and valuable properties. Our own experience, among children especially is, that when the first dislike to the taste of the oil has been overcome, the brown oils are taken more readily than the light ones, and are more valuable as regards both the degree and rapidity of their action.

In imperial half-pints, this oil retails at $1.00 a bottle.

TRADE NOTES.

Improved Paper File.

WILLY WALLACH, of Park Row, New York, has a novelty in paper files which "works like a charm," and is as good to use as it is to sell. The needle is like the tongue of a buckle; its point catching under the nose of the figure.

To put a paper on the needle, one edge of it is pushed under the nose, when a gentle pull downward engages the sharp point of the needle, and the thing is done. To take a paper off, pull hard, and it tears away with but little injury to its margin. The price is $1.75 per doz., 25 cts. at retail.

"Centennial" Card Holder.

ANOTHER of Willy Wallach's novelties is a little silvered stand which is handy for holding cartes-de-visites, card callendars, price marks, advertising cards, etc. We are using one on our table to hold memoranda where we shall be sure to see them. It consists of a base upon which is mounted a shield, stand of colors, and a spread eagle. In an opening in the shield is suspended a miniature model of the "Liberty Bell," and behind are a couple of springs which, with the eagle and flags, hold anything put between them. These sell at $1.50 per doz., or 20 cts. retail.

Exhibition of Electric Apparatus.—The Palais de l'Industrie in Paris, will be placed, from July 1, to Nov. 30, 1877, at the disposal of Count Hallez d'Arros, who has undertaken the management of an international electrical exhibition, to be held between the above dates.

NEW PATENTS AND LAWS.

TRADE MARKS REGISTERED IN U. S. PATENT OFFICE.

Certificates dated Feb. 15, 1876.

3,413. **Aerated and Fermented Beverages.**—John W. Day, New York, N. Y. Application filed Jan. 3, 1876. "A bottle with an elliptical or oval filling and discharging orifice."

3,420. **Medical Compound.**—Ernest Weber, Brooklyn, N. Y. Application filed Jan. 24, 1876. Word "Kaiser."

Certificates dated Feb. 22, 1876.

3,438. **Spectacles and Eyeglasses.**—Julius King, Cleveland, Ohio. Application filed Feb. 2, 1876. Figures "76."

3,453. **Perfumery.**—Emil Mayer, New York, N. Y. Application filed Feb. 5, 1876. "A small glass medallion, of round, oval, or other shape, which is supported in suitable manner at the inside of the perfumery bottle, and furnished at one side with the numerals '1776,' and at the other side with the numerals '1876.'"

3,456. **Preparation for Throat or Bronchial Affections.**—George Frederick Roberts, San Francisco, Cal. Application filed Feb. 19, 1876. Words "Fog Drops."

Certificates dated Feb. 29, 1876.

3,462. **Medical Compound.**—J. C. Frese & Co., Hamburg, Germany. Application filed Dec. 27, 1875. Words "Hamburger Thee."

3,463. **Medical Compound.**—J. C. Frese & Co., Hamburg, Germany. Application filed Dec. 27, 1875. Words "Hambro Tea."

3,476. **Medical Preparation.**—Henry L. Sage, Bridgeport, Conn. Application filed Feb. 9, 1876. Word, name, or denomination "Odontolum."

3,480. **Perfumery.**—Alfred Wright, Rochester, N. Y. Application filed Feb. 14, 1876. Words "Mary Stuart."

Certificates dated March 7, 1876.

3,485. **Perfumery.**—Leon Backer & Co., New York, N. Y. Application filed Jan. 20, 1876. "The figure of a crown above a shield, wherein is a figure of an ancient Roman galley, and which is printed upon a couple of crossed tree or vine branches."

3,500. **Medicine.**—Edward H. Flagg, Brooklyn, N. Y. Application filed Feb. 23, 1876. Words "Pain Balm."

LABELS REGISTERED IN U. S. PATENT OFFICE.

Certificates dated Feb. 15, 1876.

533. "**Parker's Hair Balsam.**"—Hiscox & Co., New York, N. Y. Case A. Application filed Jan. 29, 1876.

534. "**Parker's Ginger Tonic.**"—Hiscox & Co., New York, N. Y. Case B. Application filed Jan. 29, 1876.

535. "**The Great East India Remedy.**"—F. C. Klaiss, Progress, Pa. Application filed Feb. 10. 1867.

536. "**Lydia E. Pinkham's Vegetable Compound.**"—Lydia E. Pinkham, Lynn, Mass. Application filed Feb. 9, 1876.

538. "**Cosmetique Grande a la Turc.**"—Smith Brothers, Boston, Mass. Application filed Feb. 9, 1876.

539. "**Dr. Albert Conradi's Augsburger Brust Thee.**"—Leopold Solomonson, Cleveland, Ohio. Application filed Feb. 9, 1876.

540. "**Wilkins' Compound Extract of Eucalyptus.**"—Jason Wilkens, Clinton, Iowa. Application filed Feb. 5, 1876.

542. "**Fleming's Hair Tonic.**"—Mary C. Fleming, Cambridge, Mass. Application filed Feb. 11, 1876.

544. "**Hooper's Headache Lozenge.**"—Howarth & Ballard, Utica, N. Y. Application filed Feb. 9. 1876.

545. "**Dr. Russell's Golden Bitters.**"—Wm. B. Russell, St. Louis, Mo. Application filed February 10, 1876.

547. "**Directions for Inhaling Dr. Townsend's Oxygenated Air.**"—E. F. Townsend, Providence, R. I. Application filed Feb. 12, 1876.

548. "**Belt's Stomach and Cocktail Bitters.**"—Trueman Belt & Sons, Baltimore, Md. Application filed Feb. 11, 1876.

February 29, 1876.

550. "**Alton's Excelsior Troches.**"—John H. Alton, Boston, Mass. Application filed Feb, 25, 1876.

551. "**W. A. Bow's Star Liniment.**"—Wallace E. Bow, Fowlerville, N. Y. Application filed Feb. 17, 1876.

552. "**Bœricke & Tafel's Concentrated Extract of Hamamelis.**"—Bœricke & Tafel, New York, N. Y. Application filed Feb. 25, 1876.

553. "**Dr. Gale's Zoagria or Fruit Tonic.**"—William Gale, Chicago, Ill. Application filed Feb. 14, 1876.

555. "**An Old Sailor's Cough Remedy.**"—H. C. Holtin, Hoboken, N. J. Application filed Feb. 17, 1876.

558. "**Kendall's Spavin Cure.**"—B. J. Kendall, Enosburgh Falls, Vt. Application filed Feb. 18, 1876.

560. "**Megow's Hair Restoratives.**"—Herman Megow, Princeton, Wis. Application filed Feb. 18, 1876.

561. "**Geranium Liquid Glycerine Soap.**"—Munckton & Co., New York, N. Y. Application filed Feb. 23, 1876.

562. "**Dr. Munckton's Pure California Wine Bitters.**"—Munckton & Co., New York, N. Y. Application filed Feb. 18, 1876.

March 7, 1876.

569. "**Swiss Ague Cure.**"—Jules Honriet, Terre Haute, Ind. Application filed Feb. 28, 1876.

570. "**Lactine—The best substitute for healthy Mother Milk.**"—K. Jungk, Cincinnati, Ohio. Application filed Feb. 28, 1876.

571. "**Lewis' Old English Liniment.**"—Winslow N. Lewis, Boston, Mass. Application filed Feb. 28, 1876.

575. "**Strickland's Panacea Liniment.**"—Bedford S. Strickland, Griffin, Ga. Application filed Feb. 25, 1876.

576. "**Diphtherial Lozenges.**"—Harriet A. Stone, New York, N. Y. Application filed Feb. 25, 1876.

580. "**Green Mountain Asthma Cure.**"—J. H. Guild, Rupert, Vt. Application filed Mar. 3, 1876.

583. "**Purcell's Pine Tar Cough Syrup.**"—William Purcell, New York, N. Y. Application filed Mar. 1, 1876.

585. "**Dr. Arnold Wilhelmy's Genuine Essence of Alpine Herbs.**"—Louis Scholz, Cincinnati, Ohio. Application filed Feb. 17, 1876.

NEW PATENTS.

Feb. 15, 1876.

173,386. **Ozone Machines.**—F. W. Bartlett, Buffalo, N. Y. [Filed July 26, 1875.] The base of the generator is glass, and is provided on its inner circumference with semicircular cavities, which, with similar cavities in a close-fitting plunger, form complete tubes, in which are placed smaller sticks of phosphorus. The plunger regulates the height of the water around the phosphorus. The upper walls of the generator are composed of two sheets of wire-cloth, between which is placed a packing of fibrous material saturated with an alkaline solution.

173,444. **Soda Fountains.**—J. B. Chapman, Madison, Ind. [Filed Jan. 12, 1876.]

173,453. **Label-Holders.**—R. G. Dorrance, Coldwater, Mich. [Filed Oct. 25, 1875.] A label-holder consisting of a notched and flanged box having one side and one end open, and the notched follower pressed inward by the spiral spring on the guide-rod passing through one side of the box.

173,494. **Art of Odorating Pure Spirits.**—Hiram Purdy, Burlington, Iowa. [Filed April 14, 1875.] The air is first heated, to increase its capacity for absorbing moisture; and then, after being saturated with aqueous vapor, it is passed through an odorating substance, and into or through a liquid or other substance to be odorated.

173,607. **Deodorizing, Disinfecting, and Antiseptic Powders.**—Julius Fehr, Hoboken, N. J. [Filed June 23, 1875.] A deodorizing and disinfecting powder consisting of silicate of magnesia and salicylic acid, in about the proportions specified.

173,654. **Chemical Hot-Air or Vapor Baths.**—Abram M. Loryea, San Francisco, Cal., assignor of one-half his right to J. P. Jones, same place. [Filed Oct. 18, 1875.] The bath-box is composed mainly of glass for the purposes of observation, and also to resist chemical action of the medicated vapors.

173,682. **Magneto-Electric Apparatus.**—H. J. Smith, Boston, Mass. [Filed Feb. 5, 1876.] Relates to that class wherein the currents generated by revolution of armature, are laid around the electro-magnets to increase the magnetism thereof.

February 22, 1876.

173,741. **Drying Apparatus.**—Mason S. Seymour and Alonzo Hicks, Flushing, N. Y. [Filed Nov. 10, 1875.] A drying apparatus consisting of a double inclosing-case, provided with shelves arranged in a zigzag manner, and mechanism for imparting a to-and-fro motion to said shelves.

173,769. **Condensers for Fumes of Mercury.**—Charles B. Dahlgren, San Francisco, Cal., assignor of one-half his right to E. N. Riotte, same place. [Filed Nov. 15, 1875.] A fume or vapor-condenser having its walls or top composed either wholly or partially of canvas, which is saturated with water and dips into a trough of water. The amalgam being in a central basin over a furnace.

173,850. **Syringes.**—Reinholde V. Emde, New York, N. Y. [Filed Jan. 22, 1876.] A projecting lip on the exterior of the barrel-head fits in a groove, and retains, thereby, a soft rubber cap.

173,857. **Double Aprons.**—W. G. Heaney, Camden, N. J. [Filed Jan. 29, 1876.] A peculiarly arranged and constructed bag of linen used for supporting a diseased penis.

173,872. **Artificial Legs.**—Joseph B. Warner, North Dighton, Mass. [Filed Jan. 22, 1876.] The lower part of the leg, together with the knee-joint, has a slight vertical motion upon the thigh part, by means of a slotted sliding band or collar. A flexible strap passes through an opening in the sliding band, and has both its ends secured to the lower part of the limb. As the knee is flexed, this strap slides to and fro over the opening in the sliding band and between the two portions of the leg connected by the said band. The weight of the person in walking bears upon this strap and prevents the knee bending when the weight is upon it.

173,889. **Apparatus for Drying.**—Stephen R. Bradley, Brooklyn, N. Y. [Filed Dec. 18, 1873.] The material is fed, by means of a hopper, between two miller's belts which pass around steam-heated rollers, and brushes remove all that adheres to the belts after they separate at the point of delivery.

173,893. **Invalid Chairs.**—N. P. Burgess, Portland, Me. [Filed Nov. 2, 1875.]

174,018. **Electric Vapor-Baths.**—Elias Smith, Normal, Ill. [Filed Nov. 4, 1875.]

February 29, 1876.

174,075. **Soda-Casks.**—Ira N. Herrick, Chicago, Ill. [Filed Nov. 11, 1875.] The least possible metal surface is presented to the liquid in discharge by the channel, slurr, and faucet.

174,085. **Embalming Apparatus.** Geo. T. Parker, Cleveland, Ohio. [Filed Nov. 20, 1875.] Forces by one pump, and at the same time exhausts by another pump, the contents of the arteries and veins, the force operating on carotid artery, and the exhaust on jugular vein. Likewise empties intestines and stomach by operating at œsophagus and anus. While so emptying the parts by exhaust-pump, also makes partial vacuum in case. Then, by force and exhaust, fills the emptied parts (first washed, it may be), with an antiseptic fluid.

174,090. **Tumbler Washer.**—A. D. Puffer, Jr., Boston, Mass. [Filed Jan. 4, 1876.] The combination with the water-admission pipe or standard, of a tumbler-support rotated by the direct action of the water. The weight of the tumbler opens the valve, and a lateral tube throws a stream upon the side of the rotating tumbler.

174,104. **Demijohns.**—G. W. Banker, New York, N. Y. [Filed Nov. 10, 1875.] The bottle which constitutes the fluid-holding receptacle of the demijohn, is coated with a covering of elastic material, which adheres to it—as, for instance, glue and glycerine—and, while the mixture is still plastic, a covering of ground cork is applied.

174,157. **Remedies for Hog-Cholera.**—E. Royalty, Bohon, Ky. [Filed Dec. 23, 1875.] A medical composition, consisting of calomel, podophyllin, castor oil, and spirits of turpentine.

1ff4.219. **Styptic Remedies.**—B. J. Field, Leaksville, N. C., [Filed Nov. 3, 1875.] A styptic, composed of resin in solution, tannin, and camphor, substantially, as herein set forth.

174,240. **Hydrometers.**—James J. Hicks, Hatton Garden, England. [Filed Feb. 3, 1876.] Graduations of enamel fused on stem; the interior tube graduated so as to avoid action of acids on the graduations.

174,258. **Connecting-Posts for Electrical Apparatus.**—Jerome Kidder, New York, N. Y. [Filed Dec. 18, 1875.] A collar, sliding on perforated post, holds wire in place by stress of coiled spring.

174,292. **Apparatus for Making Wood-Charcoal, and Securing Acetic Acid, etc.**—Henry M. Pierce, ——, ——. [Filed Feb. 18, 1876.] Exhausts the products of combustion into a chamber holding lime, magnesia, baryta, or soda, to secure the acetic acid. Forces the uncondensed gases into the kiln, to increase combustion, or otherwise utilizes them.

174,297. **Filtering Apparatus.**—Leo Prange, South Brooklyn, N. Y. [Filed Jan. 7, 1876.] The liquid is passed through charcoal into a series of bags formed of woolen fabrics, suspended from short tubes attached to the bottom of the tank.

March 7, 1876.

174,397. **Bung-Hole Spouts.**—F. C. Wilson, Chicago, Ill. [Filed Dec. 3, 1875.] Extending the base of the spout so that the clamping-bolt may pass through this extension, and not be in the way of the liquid running through this spout; and also in a clamping device for attaching the spout to the barrel, consisting of a sliding bolt operated by a cam-lever.

174,442. **Remedies for Diseases of the Throat and Lungs.**—Ellen Rohrer, Monmouth, Oreg. [Filed Jan. 11, 1875.] A medical composition consisting of consumption root (Jacob's Ladder or *Polemonium reptans*) and mountain balm (*Eriodycton Californicum*, or Wigandia).

174,450. **Trusses.** Philip Werum, Stryker, Ohio. [Filed Dec. 7, 1875.] The pad is hollow and of sheet metal. The back is hinged to the pad and shuts over it like the cover of a box. Two slots and a button between them upon the back serve to adjust the pad and thigh-strap for either a right or left hernia.

174,534. **Bottle-Stoppers.**—Gustaf Johnson, Cambridgeport, assignor to himself, Halsey J. Boardman, Charles Mingay, and J. S. Barrow, Boston, Mass. [Filed Sept. 8, 1875.

174,540. **Catamenial Sacks.**—F. A. Knabe, Cincinnati, Ohio. [Filed Feb. 17, 1876.] A folded pocket of cloth is buttoned to the usual supporting-strap, and serves to hold napkins or sponges.

March 14, 1876.

594. **"American or Saratoga Kissengen Water."**—Earle H. Smith, New York, N. Y. Application filed March 7, 1876.

174,612. **Liquid Measures.**—Geo. W. Aldrich, Syracuse, assignor of three-fourths his right to Isaac R. Pharis, Geddes and Hermann Leonard, Syracuse, N. Y. [Filed Jan. 17, 1876.]

174,724. **Inhalers.** Niles J. Donaldson, Worcester, Mass. [Filed Jan. 8, 1876.] One of the two air-chambers has an immovable bottom-piece to contain asbestos. The asbestos serves to hold the acid, and the ammonia is placed upon a sponge in the other chamber. The two chambers connect by an opening midway of their length.

174,728. **Bottle Stoppers.** Albert Freygang, New York. N. Y. Assignor to Frederick Knief, same place, [Filed Feb. 14, 1876.] A swing lever with an excentric-recessed cam part, straight middle part, and bent handle end.

174,753. **Eye-glasses.**—Isaac Elsaunder, Washington-D. C. [Filed Feb. 19, 1876.] A spring clamp made adjustable by a set screw.

174,790. Jacob Dunton, Philadelphia, Pa. [Filed Feb. 18, 1876.] The compressor-chamber, in the base of which a short moveable die is placed, slides in guides along a frame or base support. Where the chamber is directly over a discharge, opening in the base-support, the lower die and pill may be together forced downward, and the pill will pass through a curved guide into any desired receptacle.

174,802. **Invalid Bedsteads.**—Lucius Gill, Watertown, N. Y. [Filed Sept. 2, 1875.

174,817. **Locking Devices for Bottle Stoppers, etc.**—Thomas Hipwell, Bridgeton, N. J., assignor to the Cohacsey Glass Manufacturing Company. [Filed Oct. 29, 1875.]

174,823. **Measuring Funnels.**—Daniel S. Koons, Chicago, Ill., assignor of one-half his right to John C. Cooper, same place. [Filed June 8, 1874.] A moveable valve and valve-rod, operated by a thumb-lever, which closes the exit from the funnel, which is also guarded by a hinged strainer.

174,862. **Trusses.**—Edwin R. Shattuck, Olean, N. Y. [Filed March 4, 1876.] A recess is made in the pad for receiving the intestine when protruding through the hernial ring.

NOTES, QUERIES AND ANSWERS.

[*Under this heading we shall, to the best of our ability, endeavor to answer such questions addressed to us as come within the scope of this journal, providing they are accompanied by the name and address of the writer. Answers to queries received after the 5th of the month will lay over until the next issue.*]

P. and S., Wisconsin.—We are unable to tell you what becomes of drugs, rejected by the Customs' officers as unfit for medical purposes.

The only work resembling the one on "Medicinal Plants" now being published by Lindsay & Blakiston, of Philadelphia, in two-dollar parts, with which we are familiar, is the one by Dr. A. B. Strong, referred to in our notice of L. & B.'s publication, in our last number (p. 86). This, however, is out of print, and we are not able to give the price for which it can be bought. It was not confined entirely to medicinal plants, but embraced the flora of this country.

Another very useful and valuable work of this kind is: Carsons, J., Illustrations of Medical Botany, 5 vols. fol. Phila.

Hurd & Houghton announce a work entitled "The Wild Flowers of America," in which the illustrations are to be lithographed from water-color drawings, by Mr. Isaac Sprague, and the text is to be by Prof. George N. Goodale, of Harvard. It is also to be in two-dollar parts, containing four to eight plates.

In answer to your query concerning the registration of labels, we print an extract from the "Rules of Practice in the U. S. Patent Office":

"By Act of Congress, approved June 18, 1874 (to take effect on and after the 1st day of August, 1874), it is provided that certain prints and labels may be registered in this office.

"Sec. 3. That in the construction of this Act, the words 'engraving,' 'cut,' and 'print,' shall be applied only to pictorial illustrations of works connected with the fine arts, and no prints or labels designated to be used for any other articles of manufacture, shall be entered under the copyright law, but may be registered in the Patent Office. And the Commissioner of Patents is hereby charged with the supervision and control of the entry of such prints or labels, in conformity with the regulations provided by law as to copyrights of prints, except that there shall be paid for recording the title of any print or label (not a trade mark), six dollars, which shall cover the expense of furnishing a copy of the record under the seal of the Commissioner of Patents, to the party entering the same.

Approved June 18, 1874.

"By the word 'print,' as used in the said act, is meant any device, picture, word or words, figure or figures (not a trade-mark), impressed or stamped directly upon the articles of manufacture, to denote the name of the manufacturer, or place of manufacture, style of goods, or other matter.

"By the word 'label,' as therein used, is meant a slip or piece of paper, or other material, to be attached in any manner to manufactured articles, or to bottles, boxes, and packages containing them, and bearing an inscription (not a trade-mark), as, for example, the name of the manufacturer or the place of manufacture, the quality of goods, directions for use, etc.

"By the words 'articles of manufacture,' to which such print or label is applicable by said act, are meant all vendible commodities produced by hand, machinery, or art.

"But no such print or label can be registered unless it properly belongs to an article of commerce, and be as above defined; nor can the same be registered as such print or label when it amounts in law to a technical trade-mark.

"To entitle the owner of any such print or label to register the same in this office, it is necessary that five copies of the same be filed, one of which copies shall be certified under the seal of the Commissioner of Patents, and returned to the registrant.

Form of Application for Registration.

[Making necessary changes to suit each case]

[*For an Individual.*]

To the Commissioner of Patents:

"The undersigned, John Fisher, of the city of Brooklyn, county of Kings, and State of New York, and citizen of the United States, [or resident therein, as the case may be,] hereby furnishes five copies of a print, [*or 'label,' as the case may be,*] of which he is the sole proprietor.

"The said print [or 'label'] consists of the words and figures as follows, to wit: [Description.]

"And he hereby requests that the said print be registered in the Patent Office, in accordance with the act of Congress to that effect, approved June 18, 1874.

BROOKLYN, N. Y., August 1, 1874.

————————, *Proprietor.*

[*For a Corporation.*]

"The applicant, a corporation created by authority of the laws of the State of New York, [or other authority, as the case may be,] and doing business in said State, hereby furnishes five copies of a label, [or 'print,' *as the case may be,*] of which it is the sole proprietor.

"The said label consists of the words and figures as follows, to wit: [Description.]

"And it is hereby requested that the said label be registered in the Patent Office, in accordance with the act of Congress, to that effect, approved June 18, 1874.

"Witness the seal of the said corporation at ——, ——, 1874.

—— —— —— ——,

[SEAL.]

President, [or other officer.]

"The certificate of such registration will continue in force for twenty-eight years.

"The fee for registration of a print or label is six dollars, to be paid in the same manner as fees for patents." [*i. e.* In advance, and to the Commissioner, or it may be by P. O. money order, or by transmitting a receipt or certificate or deposft from the Treasurer or an Assistant Treasurer of the United States or of any of the designated depositaries, national banks, or receivers of public monies, designated by the Secretary for that purpose. All orders made payable to the "Commissioner of Patents."

E.H.H., S.C.—So much of your question as relates to labels is answered in the foregoing. The form for an application for the registration of a trade-mark is as follows: such charges as are essential being made:—

To the Commissioner of Patents:

Your petitioners represent that the firm of A. B., C. D. & Co., is engaged in the manufacture of woven fabrics at ——, ——, and that the said firm is entitled to the exclusive use upon the class of goods which they manufacture of the trade-mark described in the annexed statement or specification, [and accompanying fac-similes].

They therefore pray that they may be permitted to obtain protection for such lawful trade-mark under the law in such cases made and provided.

A.B., C.D. & Co.
By A.B.

The particulars necessary are—

First. Causing to be recorded in the Patent Office the names of the parties, and their residences and place of business, who desire the protection of the trade-mark.

Second. The class of merchandise and the particular description of goods comprised in such class, by which the trade-mark has been or is intended to be appropriated.

Third. A description of the trade-mark itself, with fac-similes thereof, and the mode in which it has been or is intended to be used.

Fourth. The length of time, if any, during which the trade-mark has been used.

Fifth. The payment of a fee of twenty-five dollars, in the same manner and for the same purpose as the fee required for patents.

Sixth. The compliance with such regulations as may be prescribed by the Commissioner of Patents.

Seventh. The filing of a declaration, under the oath of the person, or of some number of the firm, or officer of the corporation, to the effect that the party claiming protection for the trade-mark has a right to the use of the same; and that no other person, firm, or corporation has a right to such use, either in the identical form, or having such near resemblance thereto as might be calculated to deceive, and that the description and fac-similes presented for record are true copies of the trade-mark sought to be protected. The oath must also state the domicile and citizenship of the person desiring registration.

The protection for such a trade-mark will remain in force for thirty years; and may, upon the payment of a second fee, be renewed for thirty years longer, except in cases where such trade-mark is claimed for, and applied to, articles not manufactured in this country, and in which it receives protection under the laws of any foreign country for a shorter period; in which case it shall cease to have force in this country, by virtue of the registration, at the same time that it becomes of no effect elsewhere.

B. F.—We were somewhat at a loss at first in regard to your inquiry; but on reading over your note carefully, we think you mean the substance called "*Ashberrium,*" for this is the way in which you should have spelled it. We do not know whether it is much used, but we can give you its composition. It is a patent alloy, resembling Britannia metal, invented by Ashberry in Sheffield, and consists of 80 parts of tin, 14 of antimony, 2 of copper, 2 of nickel, 1 of aluminium and 1 of zinc, with or without addition of lead.

W. H. Str.—Berzelius was born Aug. 29, 1779; died Aug. 7, 1848. Gay-Lussac was born Dec. 6, 1788; died May 9, 1850. You had better consult some biographical dictionary at one of our public libraries.

J. P.—*Bronze Powder* is prepared from the refuse of imitation silver and gold leaf manufactories. The material is rubbed through sieves by machine brushes, and the siftings passed successively through sieves of finer grain. They are further reduced in size by grinding in a chaser-mill, for which purpose thin mucilage of gum-arabic, or gum tragacanth, is added to moisten the mass and facilitate comminution. After powdering, the gums are washed out with water, the mass is dried, and either used as such, or mixed with the desired coloring matter, previously rubbed up with fat.

D. R., M. D.—*Homberg's Phosphorus* is prepared by mixing thoroughly one part of sugar with three of potash-alum, drying the mixture and then heating to redness in a retort, until fumes cease to be emitted. The resulting product is a pyrophorus; that is, it ignites when exposed to the air. The term "phosphorus," in this case, is a misnomer.

R. S.—We would suggest to you, when you have an order for *Chlorodyne* without particular specification, and when you desire to dispense a moderately-priced article, to

prepare it according to the following formula of the Pharmacopœia of the Philadelphia Hospital:

Chloroform	fl. ʒ ss.
Spts. Æther sulph.	f. ʒ iss.
Olei Menth. pip.	gtt viii.
Oleoresinæ Capsici	gtt ii.
Ext. Cannab. Ind.	gr. vi.
Morph. Muriat.	gr. xvi
Acid. Hydrocyan. dil.	m lxv.
Acid. Hydrochlor. dil.	f. ʒ i.
Glycerinæ Mellis	āā q. s. ad f ʒ iv.

M. Dose: 15 to 20 drops.

J. O'N.—*Bleu de Paris* and *Bleu de France* are not identical. The former is a blue coloring matter derived from aniline, which yields besides a number of other blue or violet-blue shades, such as *Bleu de diphenylamine* (diphenylamine-blue), *Bleu de lumière* (light-blue), *Bleu de Lyon* (Lyon-blue), *Bleu de Mulhouse* (Mülhausen-blue), *Bleu de nuit* (night-blue), *Bleu de Parme* (Parma-blue), *Bleu soluble* (soluble blue). On the other hand, *Bleu de France* (French blue), and *Bleu Raymond* (Raymond blue), are names for Prussian blue. You may consult either *Muspratt's Chemistry* (new edition), or *Karmarsch und Heeren's Technisches Wörterbuch*, for detailed information.

S. N. H., M. D., Iowa.—The formulae for Elixir of Liquorice, recommended by Mr. G. G. C. Sims, and used for disguising the taste of quinia and other nauceous powders, is as follows:—

℞ Liquorice root, ground	32 ounces.
Caraway seeds	6 drachms
Star anise	16 "
Coriander	10 "
Cinnamon bark	16 "
Water	9 quarts
Alcohol (95 per cent.)	1 quart
Sugar (white)	80 Troy ozs.

Macerate the spices with the alcohol, mixed with one pint of water, for seven days, frequently agitating; transfer to a percolator, and when the liquid ceases to drop, pour on the same menstruum until three pints have been obtained. Digest the liquorice with the water for two hours, then bring to the boiling-point, and boil for fifteen minutes; express strongly, and mix the decoction with the tincture of aromatics; let it stand for twenty-four hours, and filter. Add to the filtrate, the sugar, and agitate until dissolved; again filter, and the elixir is ready for use.

In a subsequent note, Mr. Sims says, that in order that the taste of the quinia should be effectually disguised, it should be *added at the time of taking*, using no acid.

The action of **Monobromated Camphor** is not clearly understood. Bourneville found, in the case of animals, that it diminishes the pulsation of the heart and the number of inspirations. It is undoubtedly a powerful sedative to the nervous and circulatory systems, and acts as a narcotic. It has been employed in chorea, asthma, paralysis agitans, hysterio-epilepsy, delirium tremens, infantile convulsions, and epilepsy, and has been followed by the best results in chorea and epilepsy. The proper dose has not been determined, but ranges from gramme 0.20 to 1.00, given in sugar-coated pills or gelatine capsules; the chief objection to the use of this substance being that it irritates the digestive organs. See NEW REMEDIES, Vol. II., page 126. Vol. IV. pp. 13, 206, and 248.

B. W. McM., Boston, Me.—As solvent for alkaloids, for the purpose of endermic application, we know of no better vehicle than oleic acid; such solutions may be prepared of various strength, some quite concentrated (as in the case of Morphia), others more dilute, and they are very readily absorbed by the skin.—In certain cases another method proposed by J. B. Barnes will be found useful; it consists in dissolving the alkaloid in the smallest possible quantity of glacial acetic acid, which may be added to some fixed or ethereal oil, with which it is perfectly miscible.

Aug. Z. N. Y.—Hargreave's process for manufacturing sodium sulphate consists in the direct action of sulphurous acid gas, air (oxygen) and steam, in properly constructed furnaces, upon sodium chloride. The process is carried on continuously, the furnaces lying in a circle, and each set being immediately recharged, as soon as emptied. This process does away with the use of liquid sulphuric acid, and also dispenses with the use of saltpetre, which is calculated in England to cost about 2s. 6d. per ton of sulphate produced, or just a much as the patent-dues on that quantity of sulphate amount to. The products of the reaction are hydrochloric acid, nitrogen, excess of steam, and sulphate of soda. Reaction sets in at 400° C. (752° F.), increasing with the temperature.

Ad. T. (New York City).—*Chlorophosphide of Arsenic* has been proposed as early as the beginning of 1874. Dr. Routh, at a meeting of the London Medical Society, April 27, 1874, stated that it was a valuable anti-periodic, and especially effective in cases of neuralgia. It is prepared, according to Dr. Routh, by acting with hydrochloric acid upon pure phosphorus and arsenic, in such proportions that each fluid-ounce contains 10 grains of arsenic and 16½ grains of phosphorus. While the phosphide of arsenic is insoluble in water, the chlorophosphide is very soluble, yielding a clear yellowish-green solution of a not unpleasant taste. This solution may be considerably diluted without decomposition. The dose of the strong solution is 3 to 5 minims, three times a day; but Dr. R. prefers to use one which is regulated at 15 drops. The chlorophosphide is not a true chemical compound, and might probably be also produced by either a mixture of arsenic trichloride with phosphorus chloride, or by acting upon phosphorus and arsenious acid with hydrochloric acid.

A. S. B.—*Toddy* is the appellation of a peculiar liquor prepared by the inhabitants of Ceylon from the juice of the cocoa-palm, obtained by incisions made at the top, where the leaves shoot up, and collected in earthen vessels,—but only during nighttime. This liquor, when drunk before the heat of the rising sun has caused it to ferment, is very wholesome and cooling, and operates as a gentle purgative. But, upon being fermented, it becomes intoxicating; and in this state is well known to the European soldiers, who use it in large quantities, when they cannot procure the arrack distilled from it. In Europe and in this country the name is often used to denote any kind of intoxicating liquor.

Vega.—*Conditum Proscarabæorum* is a preparation which was held once in great esteem, but has now fallen into merited disuse. The Prussian government, many years ago, purchased from a Silesian peasant the recipe of this composition, which was highly extolled as a remedy for hydrophobia. It consists mainly of honey containing oil-beetles. This oil-beetle (*Meloë majalis*, or *proscarabæus*) exudes from its joints, when touched, a yellowish blistering juice, which contains cantharadin, and to which have been ascribed remedial virtues. The living beetles were taken up carefully with a pair of pincers, their heads cut off, and immediately immersed into honey, to prevent any loss of the juice.

G. B. Ph.—The following is the composition of *Emplastrum aromaticum* Phar. Germ. (*Aromatisches Magen-Pflaster*): Take of yellow wax 32, suet 24, turpentine 8 parts; melt them, and to the partially cooled mass, add of oil of nutmeg (expressed) 6, olibanum (powdered) 19, benzoin (powdered) 8 parts, oil of peppermint, oil of cloves, each 1 part. They are intimately mixed, formed into rolls, and kept in wax-paper.

A Prescription Clerk's Mistake.—The *Chicago Times* of March 23, speaks of a fatal mistake occurring recently in Chicago, in which, owing to the labels having been put upon the wrong bottle, a woman took table-spoonful doses of a liniment containing arnica, capsicum, and ammonia, which ultimately caused her death.

PRESCRIPTIONS AND FORMULÆ.

Malt-Extract Bonbons.—Mr. Jul. Drandorff furnishes us with the following recipe for preparing Malt-Extract Bonbons: Dissolve 1 troy-ounce of extract of malt in 1 pound of water, add to the solution 1 pound of sugar, and dissolve. Heat the whole to a temperature of between 280 and 300° F., and occasionally remove a sample by means of a clay pipe. If the adhering sugar, after being properly cooled off in cold water, detaches itself easily, the boiling may be discontinued. The contents of the vessel are poured out on a marble slab or copper plate, and are cut into properly shaped pieces. It is important to choose the best quality of sugar, and to dissolve it completely before boiling.

J. Ashburton Thompson's Solution of Phosphorus.—Take of Phosphorus 1 gr. (0.06 gm.) Absolute Alcohol 5 fl. ʒ (18.4cc.) Dissolve the former in the latter by gentle heat, and add to it a previously warmed mixture of Glycerine 1½ fl. ʒ (44.2 cc.) and Alcohol 2 fl. ʒ (7.4 cc.), and Spts. Menthæ Pip. 40 min. (2.5 cc.)—One fluid-drachm of this solution contains $\frac{1}{15}$ gr. (0.0017 gm.) of Phosphorus.

Tinctura Phosphori, *(Bellevue Hospital.)*—Take of clean, transparent Phosphorus 32 grs. (2.07 gm.) Absolute Alcohol 46 fl. ʒ (1357 cc.). Digest the Phosphorus in the Alcohol on a water-bath in a flask provided with a reflux condenser, until solution has taken place. Allow the solution to cool, and add to it 1 fl. ʒ (29.5 cc.) of Essence of Vanilla, and 3 fl. ʒ (11 cc.) of Oil of Orange. Finally make up the bulk with Absolute Alcohol to 48 fl. ʒ (1416 cc.)—Twelve fluid drachms (44.2 cc.) of this solution contain 1 gr. (0.06 gm.) of Phosphorus.

Indelible Ink.—The following is said to be a very good, cheap article: lampblack one part, syrupy potassium silicate 12 parts, water of ammonia 1 part, distilled water 38 parts.

Clark's Patent Stamp-ink consists of a filtered mixture of any coloring matter (soluble in alcohol and glycerine) 2.9 parts, alcohol (50 per cent.) 44 parts, glycerine 33 parts.

Shiels' Aromatic Cachou and Jockey Club Perfume for the Breath.—James A. Shiels & Co., of this city, furnish us the following formula: Oil of Musk, 2 oz; Oil of Rose-geranium, ½ oz; Oil of Cinnamon, and Oil of Cloves, of each, 1 oz.

ITEMS.

College of Pharmacy of the City of New York.—The annual meeting of the College was held in the University Building on March 18th, at 7.30 P. M. The reports of the officers and committees having been submitted, the members proceeded to the election of officers for the ensuing year, with the following result: *President*, Paul Balluff; *Vice-Presidents*, Ewen McIntyre, B. H. Reinold, H. J. Menninger, M. D.; *Treasurer*, Theobald Frohwein; *Secretary*, M. L. M. Peixotto; *Trustees*, Gust. Balser, Henry A. Cassebeer, jr., David Hays, Fred. Hoffman, Ph. D., Ed. L. Milhau, Wm. Neergaard, M. D., Wm. M. Olliffe, Gust. Ramsperger, F. Alfred Reichardt, Charles Rice, Dan. C. Robbins; *Committee on Revision of Pharmacopœia*: P. W. Bedford, P. Balluff, Charles Rice; *Committee on non-officinal Formulæ;* F. A. Reichardt, P. W. Bedford, E. McIntyre, Wm. Neergaard, M. D., Chas. Rice; *Delegates to Am. Pharm. Assoc.*: P. Balluff, D. Hays, F. Hoffman, Ph. D., E. McIntyre, Wm. Neergaard, M. D.

The public commencement of the College was held on Tuesday evening, March 21, at Chickering Hall. Prof. Edw. Curtis, M. D., delivered the address to the graduates, as subject for which he chose the Ethical Relations of the Physician and the Pharmacist. The following gentlemen received the degree of Graduate in Pharmacy:—Adolph Basora, Lewis Blumauer, Clarence F. Booth, James P. Boyle, Augustus R. Castano, H. Lieber Coit, Albert Dovell, George Eberhardt, Frank H. Falkenreck, George C. Fountain, Otto T. Frohwein, Albert T. Guenther, John C. Heidingsfelder, Adolph Henning, Frederick Huehne, Gilbert P. Knapp, Otto G. Lauc, Henry Lehman, William J. Liell, Alexander M. Linnett, William Maass, Thomas J. Magee, Ewen McIntyre, jr., James Miller, James K. Morrill, Adrian Paradis, George F. Payne, Henry F. Pembleton, Benjamin F. Quackenbush, Gustavus Rothe, Henry C. Schranck, Peter J. Schuman, Theodore A. Spear, Louis L. Staehle, Henry A. Striker, Theodore Thieme, Joseph E. Tomas, William H. Townsend, John H. Wenzel. The Alumni Association of the College had offered three prizes to the most successful candidates, a gold medal as first, and two silver medals as second and third prizes. The first was awarded to Mr. Henry C. Schranck, the others to Mr. James Miller and Mr. Adolph Henning. Honorable mention was made of Messrs. Schuman, Blumauer, McIntyre, Morrill, Frohwein, Coit, and Quackenbush, Mr. H. L. Coit delivered the valedictory, and at the close of his address presented to the College, as a gift from the class of '76, a superb crayon-picture of Prof. W. De F. Day.

The Alumni Association of the College of Pharmacy of the City of New York held its fifth annual meeting, Wednesday evening, March 15th, 1876. President G. C. Close in the chair. Some fifty members were present, and nineteen of the class of '76 joined the Association.

The President, the oldest living graduate, read his annual address, and gave an interesting account of the apothecaries and doctors who were prominent in the city when he graduated, in 1831. The address will be published in the annual report.

The Treasurer, Theobald Frohwein, reported $205.80 cash on hand, and $46.42 in the reserve fund. An election of officers was then held, which resulted in the choice of the following gentlemen: *President*, Ewen McIntyre; *Vice Presidents*, Starr H. Ambler, Chas. A. Robbins, Ph. D., Henry C. Schrank; *Secretary*, Prof. P. W. Bedford; *Treasurer*, Theobald Frohwein; *Registrar*, Lucien M. Royce. To fill vacancies in the Executive Board, Byron F. McIntyre, Thomas Main and Edward W. Runyon. Delegates to the American Pharmaceutical Association, Geo. C. Close, Theo. Frohwein, B. F. McIntyre, S. H. Ambler, and L. M. Royce. The President appointed the following committees: On Papers and Queries, Messrs. Creuse, B. F. McIntyre and Runyon. On Publications, Messrs. Royce, Creuse and Ambler. A letter of greeting from the Alumni Association of the St. Louis College of Pharmacy was read, and the Secretary was directed to write an appropriate reply, reciprocating the kind feelings expressed.

Prof. Bedford offered a resolution that the Association give in the future three medals, of gold, silver, and bronze, to the students rating respectively first, second, and third, at the annual examination. The resolution was passed unanimously. Mr. Creuse read a paper entitled "A New Explosive Mixture," which was referred for publication. The meeting then adjourned to the College Cabinet, where a bountiful collation had been prepared.

Prof. Bedford, on behalf of the Association, welcomed

the class of '76, who were the guests of the evening, telling them that on this occasion they might forget the caution taught by their motto, *Cavendo tutus*, as there were no poisons here. After an hour very pleasantly spent, the company separated, very well pleased with the work of the committee on entertainments. The next meeting will be held in June, when the officers elect will be installed.

The California Borax Product.—According to the San Francisco *Commercial Herald*, the Riddell Company made 600 tons of borax in 1875, and intend to increase their product during 1876 to 1000 tons. Their price last year in San Francisco was 6 3-8 cents per pound, but they decline to renew contracts at that rate, or even to take orders at 6½ cents. The total production of borax in Nevada and California reached 2,000 tons, and as the Southern Pacific Railway is extended, the price of the product will probably decline.

M. de Boucherville.—*L'Union méd. du Canada* says: When this gentleman practised medicine at St. Athanase, he did not much like to be disturbed at night, and if any one knocked at his door at night he always asked if there was any money in the case. If the reply was that the pay was good, the applicant was told to go to some doctor at St. Jean; but if the reply was that the patient was poor, M. Boucherville dressed, sent for his carriage, visited the patient and left him money.

Mineral Cotton.—This substance is employed for enveloping pipes, reservoirs, &c., of water or steam, to prevent cooling, has for some time been prepared in metal-works by passing a current of steam over fused dross. It is white or greyish, and the filaments are strewn with little glass globules perceptible to the touch, and falling down when shaken. The length of thread sometimes reaches nearly two inches, but most of them are much shorter. When the substance is squeezed, a crashing is heard, owing to the breaking of the threads, or perhaps only their rubbing. It is not hygrometric, but capable of retaining much water.

Mineral cotton is a very bad conductor of heat. When placed on the skin, it produces a sensation of heat. In order that pipes, &c., may be effectually prevented from cooling, they must be covered with a layer of mineral cotton 3 inches deep; thus a surface of a square metre (nearly 14 square feet) requires 4 kilogrammes (nearly 9 lbs.) of the substance. No warmth is felt on touching a steam pipe thus covered.

An Austrian Pharmaceutist, in Vienna, has adopted the plan of indicating on the labels of jars and bottles the weight of the maximum pharmacopœial doses. The dispenser is thus warned at once if he meet with a prescription in which the maximum dose is exceeded, and can institute measures to assure himself against fatal errors by the writer.

Sale of Secret Remedies in France.—M. Dr. Bourdonelle, a physician and M. Martin, a pharmaceutist, both residing at Paris, were arrested for selling a *Syrup of Cabory*—"a secret remedy whose formula is not inscribed in the codex." The physician received from the druggist 400 francs a month for the privilege of sale, and the physician recommended it in his practice and sent his patients to the druggist. On trial the physician denied any collusion with the druggist. The tribunal fined them 100 francs each.—*France Medicale*, Jan. 19, 1876.

Pharmaceutical Society of Ireland.—The first examination in connection with the newly instituted society took place on the 1st of March, when ten candidates presented themselves for examination, nine of whom were successful. At a meeting of the Council, recently held, the following resolutions were passed:—"That the fee for a licentiate of the Apothecaries' Hall to be registered as a pharmaceutical chemist shall be three guineas; that the annual subscription for membership of the Society be fixed at one guinea; for life-membership, ten guineas; and that candidates who may be rejected prior to October next shall be entitled to present themselves for re-examination on the same conditions in twelve months after that date."

The Philadelphia College of Pharmacy.—On the evening of March 14th was held the fifty-fifth annual commencement of this institution. The degree of graduate in Pharmacy was conferred on 104 students.

Candidate for the certificate of proficiency in Chemistry and Materia Medica, Chipman Botsford, Canada.

Prof. Robert Bridges awarded the Proctor prize.

Prof. Joseph P. Kemington, Ph.G., delivered the valedictory address to the graduates, which was well received.

The annual reception to the graduating class was given by the Alumni Association. An introductory address was delivered by Dr. A. W. Miller, President of the Alumni, after which certificates of membership were presented to the graduating class. The orator of the evening, Charles L. Eberle, was then introduced, and delivered an interesting address.

Oleic Acid as a Solvent and Test for Gum Copal.—A very small quantity of oleic acid dropped upon a sample of gum copal, and but gently warmed, will dissolve that gum completely. It is also an excellent reagent for distinguishing true amber from its imitation in copal.

Scammony.—In comparing the scammony of commerce with the resin extracted from the imported roots of *Convolvulus Scammonia*, M. Hess has observed that tannin never occurs in Smyrna scammony, whilst it is present, to a small extent, in the product extracted from the root. This tannin gives a violet color with the persalts of iron; it may be removed by treating the alcoholic solution of the resin with animal charcoal.

Hop-Oil for Beer.—J. H. Johnson, of London, has taken out a patent for using hop-oil instead of hops, in brewing. He directs a current of air, heated to 100 deg. C., to be passed through hops, packed in a cylinder; the oil to be collected, and two drops of it used for each two gallons of beer. He adds, however, that the hops should be baled after this treatment, as usual, and disposed of!

Adhesive Plaster, containing salicylic acid, is the latest method for administering this substance.

Adulterated Quinine.—Messrs. Howard & Son, of London, report a letter received by them from a foreign merchant, who, though he had a high opinion of their quinine, found it too good for his market. He promised them large orders if they would put up, expressly for him, half-ounce vials, containing 65 per cent. of quinine, and 35 per cent of magnesia, so that he might compete with a French product, containing, he said, 40 per cent. of magnesia. We hardly suppose that Messrs. Howard had to wrestle long with the temptation, and it was unnecessary for them to remark that they sent their correspondent "a suitable reply."

Circular Crystals.—An interesting paper was read at the last meeting of the Royal Society of Edinburgh, by Mr. Dallass, on Circular Crystals. The author remarked, that notes in this phenomenon had been seldom communicated. Sir D. Brewster had been only able to get such crystals of microscopic dimensions; but some time ago he (Mr. Dallass) had found that by crystallization, by means of gum arabic, circular crystals of much greater size were formed. This took place with certain salts, but not with all that he had tried. Among the more successful were sulphate of copper, binacetate of lead, and muriate of morphia.

Reclamation of Butter.—"The *Glasgow News* has just published the almost incredible result of an inquiry into trade practices, in the reclamation of butter, to which its attention had been directed by a trade circular some time back, issued by a firm established in Leith and Glasgow, offering to reclaim old butter, removing any taste of tallow, grease, and also bad smells, etc., at the same time slightly increasing the weight, at the rate of 7s. 6d. per cwt. if in casks, or 10s. 6d. per cwt. if in Irish lumps.

"In order to test these promises, the *Chemist and Druggist* says that two gentlemen were commissioned to make preliminary inquiries as probable customers. They were informed that grease-butter, or even 'scrapings' (a technical term for refuse butter), could be turned out either in the form of finest tub butter or Irish lumps, according to the quality of the stuff originally sent; that butter treated by this process had hitherto given entire satisfaction, except in one solitary instance, that of a Liverpool firm, which was particularized; also that at the Leith works of the firm the amount daily sent out was, on an average, 35 cwt. They therefore agreed to send a sample for treatment, and the following course was adopted: A Coleraine butt of grease-butter, sold for lubricating purposes, was purchased, and there was incorporated with it a small quantity of Russian tallow, some of which had passed through the printing-office machinery, and had absorbed particles of blacklead and mineral oxides from contact with the bearings of the shafting. A common tallow candle from which the wick had been removed was also added. The compound and the tallow candle were carefully melted into the grease-butter, and, notwithstanding the offensive character of these additions, the butter was so decomposed as completely to disguise them. Thus prepared, the firkin was sent to the works, with a request that it be turned into 'lumps of a bright yellow color, for sale in the English market, and with a stubble-grass smell.' The firm characterized the sample as 'very bad,' but promised to do their best with it. In the course of a few days the butter was returned re-converted, its weight on return being 51½ lbs., against 47½ lbs. when sent for treatment. Were it not for some mineral particles discovered on strict examination it would hardly have been possible to have identified the sample, so remarkable was the change in the whole composition. These statements are verified by the city analyst, who described the original butter as 'in the last stage of rottenness, having a disgusting odor, covered with green mould, and maggoty.' If it be true that from these works 3,920 lbs. of this converted butter has been issuing daily to all parts of the kingdom, we may all indulge in a shudder at the thought of the possible lubricants on which we have been regaling of late." —*Med. Press and Circular.*

A New Branch of Japanese Industry.—It appears that the Japanese, in their eagerness to raise themselves to the level of Western civilization, are developing arts not unknown to the latter, but which are yet not in themselves to be enthusiastically commended. They have apparently arrived at some degree of perfection in imitating the trade-marks and labels of certain well-known firms, and Messrs. Bass are, of course, among the victims. There is no telling what beautiful compound may be palmed off under cover of that magic name by the native shop-keepers. Their inventive flights do not stop short, however, at "bitter beer," and it is somewhat alarming to hear that such things as drugs and chemicals are considered promising articles for the exercise of Japanese ingenuity. Only lately we read in a Yokohama print that "a large printing establishment in the metropolis (Tokio) is busily engaged in turning out thousands of labels of Dr. Collis Browne's 'Chlorodyne,'" and as it is scarcely probable that Mr. Davenport would place his printing favors so far from home, the inference drawn by another paper, "that some enterprising native firm has started a manufactory of spurious chlorodyne," seems a correct one. A firm of commission merchants at Yokohama state that a sample of morphia, purporting to be of T. & H. Smith's manufacture, has come under their notice, bearing strong indications of being a forgery. The chemical knowledge of the Japanese is not very profound, and would scarcely extend to the manufacture of the opium alkaloids, and it is not improbable that this so-called morphia hails from the Continent. However, the Japanese themselves appear to be advancing with alarming rapidity in the art of perpetrating frauds, and unfortunately the market affords special facilities for the disposal of spurious goods bearing well-known labels and trade-marks. The native consumers are not yet thorough judges of the quality of the article, and pin their faith mainly on the labels on the outside. Thus they are easily gulled by the imitative genius of their countrymen. It is difficult to devise a remedy for such a state of things, but it is clear that manufacturers would do well to advise their agents in Japan to be on the alert in a matter so nearly affecting their interests. —*British Trade Journal.*

Alcohol in Parsnips.—It will surprise total abstainers and others to learn that, according to Dr. Gutziet, ethyl alcohol is present in the unchanged sap of the fruit of certain umbellifers, the cow-parsnip (*Heracleum giganteum*) and the common parsnip (*Pastinaca sativa*) being good examples. It is, however, suspected that the combinations detected may have been present as ethers and been decomposed by distillation.

Consumption of Anthelmintics in the French Hospitals.—At the desire of the Medical Society, M. Regnault has compiled some statistics as to the consumption of anthelmintics in the Paris hospitals from 1864 to 1874 inclusive. The only kinds used are the flowering heads of kousso, pumpkin seeds (*Cucurbita maxima* and *C. Pepo*), pomegranate root bark, and the rhizome of male fern. The figures show a continual increase in the consumption during the 11 years, which has become much more considerable since 1870, the quantity of kousso and male fern being more than double that used previously. This result M. Regnault attributes to the exceptional quality of food available during the siege of Paris.

Novel Butter-Analysis.—"Take two white mice, place them in separate cages, feed one with the butter under examination, and the other with good salt butter. After a time, vary the experiment by giving the good salt butter to to the first, and the suspected butter to the second." According to the *Manchester Guardian*, this method has been already adopted by certain Manchester chemists, in the course of an inquiry into a fatal outbreak of diarrhœa at the Manchester Warehousemen and Clerks' School, Cheadle, Hulme, the result reported being "that each mouse in its turn" showed symptoms of illness, accompanied by considerable purging.

A Question of Copyright in a Name.—One of the four monks who are the sole possessors of the secret for making the famous Chartreuse liqueur, has commenced legal proceedings against a firm in London, to restrain it from selling as "Chartreuse" any commodity not manufactured in their monastery. The defendants deny that the plaintiffs have any right to the exclusive use of the word, and the hearing is to take place in this month.

Scientific Men of the French Senate and Chamber of Deputies.—A correspondent of an English medical journal, writing from Paris, says that the number of medical men who have been elected members of the Senate and Chamber of Deputies at the late elections has caused some surprise, there being thirty on the list. Among them are MM. Robin and Littré, who have attained the high position of Senators; Bert, Cornil, Lionville, and Naquet, who have been elected Deputies. "M. Raspail, an old *Pharmacien*, who has rendered himself famous as an empiric in politics as in medicine, had, owing to his being the senior deputy by age, the honor of being elected *ad interim* President of the Chamber of Deputies," holding the post for a few days only when the regular President was nominated. M. Raspail is now eighty-two years old.

Bromine vs. Bromine.—A few weeks ago a young physician in a city which shall be nameless, called upon a druggist and requested to be furnished with the following preparation as he desired to try the effects of bromine in a particular case:

℞ Brominii grs. x.
Aquæ ʒi M.

The druggist, not having any bromine in stock, promised to send the preparation to the physician's office. Having sent for an ounce of the article, he opened the package and put up the prescription. Some time afterwards the physician, intending to try the same remedy again, wrote the same recipe, which was, however, put up at another store. When the physician called upon his patient on the following day, he was dismayed at the bad effects which his prescription had produced; he desired to see the bottle, and instantly informed the patient that the apothecary had made a serious mistake. The latter, when called upon, denied the allegation, and all but convinced the doctor that the mistake must be laid somewhere else. Accordingly, the physician called upon druggist No. 1, who produced *his* bromine, consisting of—chalk, of which he had carefully weighed out 10 grains, never dreaming that there might be concealed within the chalky outside a bottle containing the desired substance. Finale:—*Tableau.*

An Ancient Prescription.—A correspondent of the *American Bibliopolist* says, "I have just met with the following prescription in an old Italian book, printed at Venice in 1644:

Questo è un remedio santissimo per la testa dato da mistro Michelle Savonarola.

℞ Specierum aromatici rosati.....drag. iiij.
Trium sandalorum.....drag. ij.
Zucchari albissimi.....drag. x.

Et cum aquâ bugolosâ et rosata, et fiat confectio in rotulas tres pro unâquâque dragma. [! Ed. N. R.]

"This Michele Savonarola was, I presume, the grandfather of the celebrated Savonarola. He was a distinguished physician, and was invited to Ferrara by Nicolo d'Este. If all his perscriptions contained such nice ingredients, it is not surprising that he became famous."

Asbestos Powder as a Cement.—Asbestos powder made into a thick paste with the liquid silicate of soda, according to a leading English authority, is stated to be found to be of great advantage for making joints, fitting taps, connecting pipes, and filling cracks in retorts. It is said to be of great service in the manufacture of nitric acid, sulphuric acid, and other products, because it can be as easily made as applied, hardening rapidly, and preventing the escape of acid vapors.

Malpractice by a Druggist.—A druggist in Birmingham, England, named James Harrison, is in custody on a charge of having, by improper treatment, caused the death of a woman named Rhoda Done, who expired in childbirth, and whom he had for some time attended. He is to be tried on the charge of manslaughter.

The University of Moscow has just celebrated the 121st anniversary of its foundation. During the last year eight fresh bursaries were founded, and, besides collections of books, journals, and scientific specimens, the University has received a legacy of 8,600 roubles, the interest to be applied to the assistance of poor students. Amongst the foreigners of distinction who have received diplomas of honor from the University, we remark the name of Oscar II, King of Sweden. The number of professors and persons engaged in the administrative body of the University amounts to 142, besides 12 *privat-docenten* and 22 assistants, to govern and teach 1,259 students, 44 free students, and 170 assistants studying pharmacy alone.

Consumption of Patent Medicines in Great Britain.—The stamp duty on patent medicines in Great Britain shows an increase of £13,849 in the consumption in the year ending March 31, 1874. The duty in 1874 was £95,388; and in 1785, £109,237.

The Dosimetric System in Therapeutics.

A Parisian correspondent of the *British Medical Journal* writes that he has seen the first number of the present year of the *Bulletin de la Société Thérapeutique Domestique*, which was founded about a year ago in Paris, under the auspices of a Dr. Burggraeve, retired Professor of the University of Ghent, Principal Surgeon of the Civil Hospital of that city, and founder of a new method of the treatment of diseases, to which he has given the name of *Thérapeutique Dosimétrique*. As this new system may be unknown to some of your readers, I have thought it not uninteresting to give them an idea what it consists of. In the first place, Dr. Burggraeve describes the term "*dosimétrie*" as being derived from two Greek words, δίδωμι (I give) and μέτρον (measure); that is to say, the adaptation of medicines, not only to the patient, but also to the disease. The medicinal substances employed are reduced to their utmost chemical simplicity, and it is only the active principle that is elected for administration, such, for instance, as strychnia, veratria, hyoscyamia, atropia, arsenic, etc. These are administered in the form of granules, perfectly soluble, and containing a determinate quantity: half a *milligramme* for the most active substances, a *milligramme* for those that are less active, and one *centigramme* for those that are still less so. The advantage of this form is said to consist in the physician being thus enabled, not only to make a proper selection of a single agent, but to know exactly the quantity or dose he wished to prescribe. Moreover, in this concentrated form, the medicines in ordinary use are divested of substances which are intimately associated with the alkaloid or active principle sought to fulfil certain indications, but which are not only useless for the purposes required, but are often found antagonistic in their therapeutic action. In proof of this, we have only to name two of the most popular medicines of the *Pharmacopœia*—cinchona and opium; and Dr. Burggraeve observes that the various alkaloids of these substances are often selected to fulfil entirely different indications, and when administered in a combined form, the therapeutic action of one must, more or less, annul the effects of the other. For instance, the quinia and tannin which enter into the composition of cinchona bark possess different properties: the one is strictly a cardiac remedy; it reduces the frequency of the pulse, lowers the abnormal temperature of fevers, and is the antipyretic remedy *par excellence*. The other, the tannin, is simply astringent or tonic. In opium we shall also select only two of the many alkaloids, of which this substance is composed, as an example of the difference of their therapeutic action. Morphia is reputed for its anodyne and soporific properties; whereas apomorphia, which is obtained from morphia by the simple abstraction of its water, is not only useless to fulfil these indications, but its effects would seem to be antagonistic to those of its natural basis. Moreover, it is a powerful emetic, and, as it does not possess the drawbacks of tartarised antimony, Dr. Burggraeve suggests that it might constitute an excellent vomitive for children, particularly as, (the dose being small, one or two *milligrammes* being sufficient), it could be easily disguised. The new Dosimetric Society, above referred to, is quite cosmopolitan in its constitution, and seems to fare well, as many well-known names of all countries and of all ranks of the profession (physicians, surgeons, veterinarians, chemists, dentists, etc.), are to be found on its lists.

Toughened Glass.—M. Royer de la Bastie, about a year since, patented a process by which the brittle nature of glass could be so changed, that such ordinary articles as lamp glasses, watch glasses, glass plates and dishes, &c., would bear much rough usage and throwing about without break-

ing; and the patentee hopes to be able to apply his invention to glass goods of all kinds. It would appear that the success that M. de la Bastie might have fairly anticipated has not run with him. Finding it difficult to induce glass manufacturers in this country to adopt his patent under a royalty, he commenced in France, in a small way, the production of the articles above mentioned; but by some ill-fortune the premises he occupied were twice burned down, and he is now fairly in the third attempt, expecting in two or three months to be in a position to supply, not only the simple, flat-faced articles he at the outset experimented with, but the shaped appliances numbered by thousands in constant use in households and in divers trades. James Powell & Son, Temple street, Whitefriars, last year essayed to work the invention, with unsatisfactory results, for the reason that the action of the boiled oil or grease bath was very uncertain, and where one piece was fully toughened, half a dozen others would be only partially so; while breakages, which in the case of ordinary glass caused but little loss, as the fragments could be remelted, resulted in the entire uselessness of the toughened specimens. The prices at which the firm could sell were, moreover, prohibitory of any extended trade, and we believe they have now relinquished any serious attempt to work the patent at all.—*Chemist and Druggist.*

Canine "Cod-Liver" Oil.—There is a firm in San Francisco which purchases the thousands of dogs slaughtered by the pound master of that city, or that may be otherwise killed, for which they pay 40 cents each. The carcasses are conveyed to their manufactory at South San Francisco, where the skins are removed and sold to the tanneries, the hair taken off and resold to plasterers, the hide tanned, made into gloves, and sold in the market. The denuded carcass is then thrown into a large cauldron and boiled until the bones are easily separated from the flesh, when they are removed and sold to the sugar refineries, where they are ground to a fine powder and used to clarify sugar. The oil that rises to the surface of the boiling mass is skimmed off and made into cod-liver oil, and the remainder is used for fattening hogs. - *Oakland* (Cal.) *News.*

Production of Flowers in France.—In France, in the district of the Vaar, the flower harvest includes no less than 1,475,000 lbs. or orange blossoms, 530,000 lbs. of roses, 100,000 lbs. of jasmine, 75,000 lbs. of violets, 45,000 lbs. of acacia, 30,000 lbs. of geranium, 24,000 lbs. of tuberoses, and 5,000 lbs. of jonquil. A well-known perfume manufacturer at Cannes uses annually 140,000 lbs. of rose leaves alone, and other perfume-laden flowers in proportion.

Female Apothecaries.—During the past session, two ladies have been attending the lectures at the Philadelphia College of Pharmacy. One has also attended the lectures of the College of Pharmacy of the City of New York. The Women's Medical College, of Philadelphia has also commenced to educate women as pharmaceutists, and at the Centennial it is proposed to exhibit a complete series of pharmaceutical preparations of feminine origin. The earnest of important work already given is such that Mrs. Gillespie, President of the Women's Centennial Executive Committee, has obtained an appropriation of five hundred dollars to aid in the completion of the enterprise.

Mesmeric Anæsthesia.—A lady came to my office, after having broken two engagements, to take an anæsthetic, and said, "Have you any objections to extracting teeth for me while under the influence of mesmerism? Prof. W. offers to mesmerize me." I gave my consent. He took a position in front of the patient, and after a few gentle strokes of his hands over her face, motioned to me that all was ready. Six teeth were extracted before she left the chair. She expressed herself as not having felt the least particle of pain.

I do not remember of ever having had so timid and nervous a patient. While making the preliminary examination she would not allow me to use an excavator.—J. C. Henry, in *Dental Cosmos.*

A Congress of Scandinavian doctors will be held in Gothenburg in the middle of July. In connection therewith, there will be an exhibition of physiological applications and instruments, anatomical specimens, prints, drawings, photographs, and casts, scientific works, drugs, and pharmaceutical preparations, designs for hospitals, new surgical instruments, etc. Articles intended for the exhibition will be admitted duty free, if afterwards removed.

Eau Figaro.—Dr. Karl Egger (*Wiener Med. Presse*, No. 7, 1876), analyzed the hair dye made by the Société d'Hygiène, of Paris, and known as "Eau Figaro," and found it be a solution of sulphuret of lead in a solution of alum, which is perfumed with the oil of bergamot. A solution of alum has the power of dissolving a certain amount of freshly prepared sulphuret of lead, which is again precipitated after some time by the addition of an ethereal oil. This process is apparently facilitated when the solution is thinly spread over an extensive surface; and upon this quality rests the use of the preparation as a hair dye.

The Taste of Turnips in Milk and Butter.—It is stated, upon German authority, that the unpleasant taste imparted to milk and butter by feeding turnips, etc., may be removed by simply throwing into each pan of milk, of four or five quarts, as much saltpetre as will lie on the point of a knife, when a gelatinous mass will separate from the milk, and settle to the bottom.

The Eucalyptus as an Insectifuge.—The *Garden* quotes from a private letter a statement, that the placing of a young plant of eucalyptus in a bedroom infested with mosquitoes has been found sufficient to cause the disappearance of the insects.

Borneo Camphor.—The English Consul at Labuan, speaking of the Borneo camphor, attributes its comparative rarity to the fact that not one in a thousand of the trees of the species yielding it (*Dryobalanops aromatica*, Gärt.) is found in the state which causes its secretion in the crevices of the wood. When of the first quality this variety of camphor is highly valued by the Chinese, it being specially suited to the process of embalming the dead on account of its slow loss by evaporation. Its value as an export from Brunei increased in 1874 to £2578, against £1043 in 1873.

Miss Clara Marshall, M.D., has been elected to the chair of Materia Medica and General Therapeutics in the Philadelphia Woman's Medical College, in the place of Dr. Charles H. Thomas, resigned.

The Vanilla Culture —The great demand for vanilla that has sprung up during the last few years in the markets of Europe has given a great impetus to its cultivation. To such an extent have plantations been multiplied in the island of Reunjon or Bourbon that it is reported the crop will probably, in two or three years, amount to fifty or sixty tons, being about three times the quantity exported in 1874. The cultivation is also carried on extensively in Madagascar and the Mauritius. The crop is a favorite one with the small proprietors, as provided the soil be fertile, moist, and shaded, it needs but a small space to accommodate thousands of plants, whilst at the present average price the crop yields to the cultivator a profit exceeding that obtained from any other grown in the island. The cultivators are represented, however, as having been recently very much disturbed by a report which has reached the islands, but which is received with a certain amount of doubt, that a German chemist has succeeded in extracting from the pine-tree an essence of which the perfume is identical with that of vanilla, and which can be offered in the market at a very reduced rate. It will not be inappropriate to mention here the analogous instance of alizarine, which has now so universally displaced madder, that the cultivation of madder roots is being gradually abandoned, and this branch of commerce will probably soon be extinct. A great portion of the madder land in the island of Cyprus has been already turned to other purposes, as the price to be obtained for roots no longer remunerates the grower.